CP RENEWAL VALIDATION REPORT OF CEYHAN 61.7 MW HYDROPOWER PROJECT

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		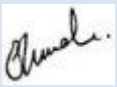
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Summary:

Re Carbon Ltd. has performed the 2nd crediting period validation of the "Ceyhan 61.7 MW Hydropower Project" in Turkey between 01/09/2021 and 29/04/2022. The validation was performed on the basis of UNFCCC criteria for CDM, VCS and host party criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The renewal of crediting period validation of proposed GS project activity includes the following phases:

- Assessment whether the baseline of the project activity is revised in the PD to reflect the most recent situation for the project activity, via a desk review of the revised PD between 01/09/2021 and 29/04/2022
- Assessment whether the applied methodology ACM0002, version 20.0, in the revised PD has been applied correctly, including the baseline selection and monitoring plan
- Assessment of data and calculation of greenhouse gas emission reductions
- Issuance of the renewal of crediting period validation report
- Independent technical review (ITR)
- Approval of the validation report and request of renewal of crediting period

The Ceyhan 61.7 MW Hydropower Project has developed by Enova Enerji Üretim A.Ş. includes Oşkan and Berkman diversion weirs and HPPs which are run-of-river hydro electrical power plants with a total installed capacity of 63.468 MWm/61.704 MWe. Oşkan HPP has 3 turbines each with an installed capacity of 7.963 MWe and Berkman HPP has 3 turbines each with an installed capacity of 12.605 MWe. The project is located on Ceyhan River, in the city of Osmaniye, in South Anatolian Region, Turkey.

The purpose of the Project Activity is to generate power in an efficient, clean, reliable and sustainable way with considering of environmental and social aspects and to reduce emissions by substituting the electricity supply of fossil fuel fired power plants.

The project start date is 03/06/2010. The start date of the second crediting period is 03/06/2020 and the end date of the second crediting period is 02/06/2030.

The project supplies electric power to the Turkish National grid. The estimated electricity production of the project is 239,946 MWh. Taking into account that the emission reduction factor is 0.4929, the estimated annual emission reduction is approximately 118,275 tCO2e.

According to UNFCCC, the Project Activity belongs to Sectoral Scope 1, category “Energy industries (renewable -/ non-renewable sources)”.

During the validation, 12 CARs and 10 CLs have been specified. There is not any FAR.

As a result of validation, Re Carbon Ltd. concludes that the review of the project description and the subsequent follow-up interviews have provided Re Carbon Ltd. with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM and VCS. Therefore, Re Carbon Ltd. will recommend the renewal of crediting period of the project by VCS.

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1 INTRODUCTION

1.1 Objective

Re Carbon Ltd. has been appointed by “Enova Enerji Üretim A.Ş.” to perform the validation of the “Ceyhan 61.7 MW Hydropower Project” in Turkey with the service agreement dated 09/08/2021. The objective of this validation activity is to have an independent third party for the assessment of the project design, and to ensure a thorough assessment of the proposed project activity against the applicable VCS and CDM requirements. In particular;

- the project's baseline is assessed against “ACM0002: Grid-connected electricity generation from renewable sources – version 20.0”
- the project’s monitoring plan is assessed against “ACM0002: Grid-connected electricity generation from renewable sources – version 20.0”
- the project’s additionality justification is assessed against “Tool “Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period”, Version 03.0.1
- the projects compliance with, the requirements of Article 12 of the Kyoto Protocol, the CDM Modalities and Procedures as agreed in the Marrakech Accords under decision 3/CMP.1, the annexes to this decision, subsequent decisions and guidance made by COP/MOP & CDM Executive Board and other relevant rules, including the Host Country legislation and sustainability criteria
- CDM Validation and Verification Standard version 3.0
- CDM Project Standard version 3.0
- CDM Project Cycle Procedure version 3.0
- VCS Version 4.0
- VCS Standard version 4.2

Validation is a requirement for all VCS projects and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of voluntary emission reductions (VERs).

1.2 Scope and Criteria

The scope of the validation is the independent and objective review of the VCS Project Description (PD). The PD is reviewed against the relevant criteria (see section 1.1) and decisions by the VCS Organization, including the approved baseline and monitoring methodology. The validation was based on the guidance given in the CDM Validation and Validation Standard version 3.0, CDM Project Standard version 3.0 and CDM Project Cycle Procedure version 3.0, VCS version 4.0 and VCS Standard version 4.2.

The validation team has employed a risk based approach to assess the completeness and accuracy of the claims and conservativeness of the assumptions in the PD. The main focus of the validation team is to identify the significant risks for the project implementation and the generation of VCUs. The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

The only purpose of crediting period renewal validation is its usage during the crediting period renewal 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 validation opinion, which will go beyond that purpose.

1.3 Level of assurance

Level of assurance of the validation report is defined as reasonable based on the handled validation process through the document review, site visit and the interviews.

1.4 Summary Description of the Project

The Ceyhan 61.7 MW Hydropower Project has developed by Enova Enerji Üretim A.Ş. includes Oşkan and Berkman diversion weirs and HPPs which are run-of-river hydro electrical power plants with a total installed capacity of 63.468 MWm/61.704 MWe. Oşkan HPP has 3 turbines each with an installed capacity of 7.963 MWe and Berkman HPP has 3 turbines each with an installed capacity of 12.605 MWe. The project is located on Ceyhan River, in the city of Osmaniye, in South Anatolian Region, Turkey.

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The project start date is 03/06/2010. The start date of the second crediting period is 03/06/2020 and the end date of the second crediting period is 02/06/2030.

The project supplies electric power to the Turkish National grid. The estimated electricity production of the project is 239,946 MWh. Taking into account that the emission reduction factor is 0.4929, the estimated annual emission reduction is approximately 118,275 tCO2e.

2 VALIDATION PROCESS

2.1 Method and Criteria

The renewal of crediting period validation of proposed GS project activity includes the following phases:

- Assessment whether the baseline of the project activity is revised in the PD to reflect the most recent situation for the project activity, via a desk review of the revised PD between 01/09/2021 and 29/04/2022

- Assessment whether the applied methodology ACM0002, version 20.0, in the revised PD has been applied correctly, including the baseline selection and monitoring plan

- Assessment of data and calculation of greenhouse gas emission reductions

- Issuance of the renewal of crediting period validation report

- Independent technical review (ITR)

- Approval of the validation report and request of renewal of crediting period

2.2 Document Review

The basis for the validation activity is the PD version 1, dated 01/09/2021 which was submitted to the validation team on 01/09/2021. This PD was revised several times due to the raised CARs and CLs, version 05 dated 12/12/2022 being the final version. The PD was assessed against;

- The methodology "ACM0002: Grid-connected electricity generation from renewable sources – version 20.0" and the associated tools
- the Host Country criteria
- CDM Validation and Verification Standard version 3.0,
- CDM Project Standard version 3.0
- CDM Project Cycle Procedure version 3.0
- VCS version 4.0
- and other relevant documents, rules and regulations listed in section 1.1 of this report
- VCS Standard version 4.2

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	"EIA is not Required" Document		21/08/2003
D02	Generation License		21/12/2006
D03	Oşkan HPP Commissioning (for all units)		03/06/2010
D04	Berkman HPP Commissioning (for Unit 1)		20/08/2010
D05	Berkman HPP Commissioning (for Unit 3)		28/08/2010
D06	Final PD for the first crediting period		02/02/2011
D07	Final Validation Report for the first crediting period		25/03/2011
D08	Berkman HPP Commissioning (for Unit 2)		15/02/2012
D09	ACM0002	20.0	28/11/2019
D10	CDM Validation and Verification Standard For Project Activities	3.0	09/09/2021
D11	CDM Project Standard For Project Activities	3.0	09/09/2021
D12	CDM Project Cycle Procedure For Project Activities	3.0	09/09/2021
D13	Draft PD for the second crediting period	1	01/09/2021
D14	Draft ER Calculation Sheet	1	01/09/2021
D15	VCS Standard	4.2	20/01/2022
D16	Meter Test Protocols	-	2010-2019
D17	Approved Design of Ceyhan HPP	-	October 2008

Document Number	Document Name	Version	Date (dd/mm/yyyy)
D18	Social Security records	-	-
D19	Final_MR_774 Ceyhan hydro for previous verification	5	12/04/2022
D20	Final_Ver Report_774 Ceyhan hydro for previous verification	2.1	12/04/2022
D21	Draft PD for the second crediting period	2	26/04/2022
D22	Draft ER Calculation Sheet	2	26/04/2022
D23	Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period	3.0.1	-
D24	Draft PD for the second crediting period	3	09/05/2022
D25	Draft ER Calculation Sheet	3	09/05/2022
D26	Draft PD for the second crediting period	4	09/08/2022
D27	Draft PD for the second crediting period	5	12/12/2022

2.3 Interviews

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

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

Reference Number	Means of Interview[1]	Full Name	Title	Organization
I01	SV	Arda Candemir	Technical Manager	Enova
I02	SV	İbrahim Özer	Village Head	Kumarlı Village
I03	SV	Zekeriya Özer	Aza	Kumarlı Village
I04	SV	Ali Özer	Villager	Kumarlı Village
I05	SV	Aslan Özer	Villager	Kumarlı Village
I06	SV	Mustafa Öztürk	General Manager	Enova
I07	SV	Koray Keskin	Trade Manager	Enova

Table 2-2: List of persons interviewed

[1] SV: Site visit (remote audit); T: Telephone; E: E-mail

2.4 Site Inspections

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

As a part of the verification activities, a remote audit was performed to the project activity site on 10/09/2021 and through Zoom program, details of which can be seen in the Table 2-3 below:

Table 2-3: Remote audit details

Date	10/09/2021	
Location	Remote audit	
Participant	**Company Name**	**Role in the Organization / Role in the Remote audit**
Arda Candemir	Enova	Technical Manager
İbrahim Özer	Kumarlı Village	Village Head
Zekeriya Özer	Kumarlı Village	Aza
Ali Özer	Kumarlı Village	Villager
Aslan Özer	Kumarlı Village	Villager
Mustafa Öztürk	Enova	General Manager
Koray Keskin	Enova	Trade Manager

Points Verified	**Source of Information**
Implementation and operation of the proposed VCS project activity as per the registered PD	Document review, remote audit and interviews with the PP representatives and local stakeholders from Kumarlı Village
Review of information flows for generating, aggregating and reporting the monitoring parameters	Document review, remote audit and interviews with the PP representatives and local stakeholders from Kumarlı Village
Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the monitoring plan in the PD	Interviews with the PP representatives and local stakeholders from Kumarlı Village
Cross-check between information provided in the monitoring report and data from other sources such as plant log books, inventories, purchase records or similar data sources	Document review and remote audit
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, remote audit and interviews with the PP representatives and local stakeholders from Kumarlı Village

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 and interviews with the PP representatives and local stakeholders from Kumarlı Village

2.5 Resolution of Findings

The crediting renewal validation of proposed VCS project activity includes the following phases:

- Assessment whether the project design of the proposed VCS project activity meets the relevant VCS requirements, via a desk review of the PD between 01/09/2021 and 29/04/2022.
- Assessment of the stakeholders' comments and how these comments are implemented in the PD.
- Assessment whether the applied methodology "ACM0002: Grid-connected electricity generation from renewable sources – version 20.0" has been applied correctly, including the baseline selection and monitoring plan.
- Assessment of application of the guidance given in Tool "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period", Version 03.0.1
- A remote audit was conducted on 10/09/2021 to assess the implementation process of the project activity and to confirm stakeholders' comments.
- Assessment of data and calculation of greenhouse gas emission reductions.
- Issuance of the validation report
- Independent technical review (ITR)
- Approval of the validation report and request of registration

The Validation Protocol is used for the assessment of each requirement during the execution of validation activities and is given in Annex-1 of this validation report.

The Validation Protocol consists of two tables:

- Table 1 (Project Description and VCS validation requirements) and
- Table 2 (Resolution of Corrective Action, Forward Action and Clarification Requests)

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

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

Question	Reference	MoV*	Findings, comments, references and document sources	Draft & Final Conclusion

The requirements related with the VCS project description and validation	Gives reference to the legislation or documents where the relevant requirement is found	Explains how conformance with question is investigated. Examples of means of validation 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 first verification

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

Table 2-5: Explanation about Table-2 in Validation Protocol

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

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

During the validation period, a Validation Protocol which is attached in Annex 1 to this validation 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 Validation team raises a **CAR** if one of the following occurs:

The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable additional emission reductions

The CDM and/or VCS requirements have not been met

There is a risk that emission reductions cannot be monitored or calculated.

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

The Validation team raises a **FAR** during validation to highlight issues related to project implementation that require review during the first verification of the project activity.

According to these principles total of 12 CARs, 10 CLs and 0 FARs were raised all of which are listed in the Validation Protocol.

All the issues raised as CLs and CARs during this validation activity, were resolved, during the written and oral communications between the Project Participant(s) and Re Carbon Ltd. validation team members. For the resolution of these non-conformities, the project participants modified the project design, rectified the PDD or provided adequate additional explanations or evidence that satisfies the concerns of the validation team members.

Concerns raised in the desk review, the audit assessments and the follow up interviews and the responses provided for the raised concerns are documented in Annex 1 – Table 2 (Validation Protocol) to guarantee the transparency of the validation process.

The appointment process of the validation team takes into account the technical area(s), sectoral scope(s), and relevant host country experience required amongst team members for the accurate and thorough assessment of the project design. The relevant VCS validation and previous ITR experiences are also assessed during the selection of the team members and Independent Technical Reviewer (ITR), respectively. The validation team and ITR are assigned to this validation activity on 08/07/2021 taking all the above factors into consideration and as a result of the contract review process.

The validation team members and ITR are given in Table 2-6 below:

Table 2-6: Validation team and ITR details

Name	Role	Host Country Experience	Scope Coverage	Technical Expertise	Financial Experise	Involv.
Fikriye Seda ATABEK	Team Leader	☒	☒	☒	☒	A, DR, R, SV
Öykü YAKUPOĞLU	Trainee Validator	☒	☒	☒	☒	DR, R, SV
Sandeep KANDA	ITR	☒	☒	☒	☒	ITR

Please list all the team members and ITR.

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

A : Administrative
DR : Desk Review
SV : Site Visit (remote audit)
R : Reporting
ITR : Independent Technical Review

2.5.1 Forward Action Requests

The Validation team raises a FAR during validation to highlight issues related to project implementation that require review during the first verification of the project activity as explained in the Section 2.5.

According to these principles no FARs were raised all of which are listed in the Validation Protocol and details of these FARs are explained in below.

3 VALIDATION FINDINGS

3.1 Project Details

The Ceyhan 61.7 MW Hydropower Project has developed by Enova Enerji Üretim A.Ş. includes Oşkan and Berkman diversion weirs and HPPs which are run-of-river hydro electrical power plants with a total installed capacity of 63.468 MWm/61.704 MWe according to the generation licence. Therefore, it is a large scale project activity.

Oşkan HPP has 3 turbines each with an installed capacity of 7.963 MWe and Berkman HPP has 3 turbines each with an installed capacity of 12.605 MWe based on the commissioning documents of both HPPs.

It is validated with Google Earth that the project is located on Ceyhan River, in the city of Osmaniye, in South Anatolian Region, Turkey.

Enova Enerji Üretim A.Ş. is the PP and this is validated via generation license, available to VVB.

It is validated via remote audit interviews that project site was greenfield land before project.

The purpose of the Project Activity is to generate power in an efficient, clean, reliable and sustainable way with considering of environmental and social aspects and to reduce emissions by substituting the electricity supply of fossil fuel fired power plants.

It can be seen in the Oşkan commissioning document that the project start date is 03/06/2010. The start date of the second crediting period is 03/06/2020 and the end date of the second crediting period is 02/06/2030.

The project supplies electric power to the Turkish National grid. The estimated electricity production of the project is 239,946 MWh with respect to the generation licence. Taking into account that the emission reduction factor is 0.4929, the estimated annual emission reduction is approximately 118,275 tCO2e.

According to UNFCCC, the Project Activity belongs to Sectoral Scope 1, category “Energy industries (renewable -/ non-renewable sources)”. The project type is Type I – Renewable Energy Projects.

Eligibility of the project is approved by the followings:

- The project applies methodology ACM0002 - Version 20.0, which is an approved methodology under VCS.
- The project type is hydro and an eligible project type as per the 1.1. Eligible Project Types & Scope under Renewable Energy Activity Requirements.
- The project activity results in displacement of electricity from thermal power stations while contributing to sustainable development of Turkey. Hence, the project contributes to the VCS and Mission.
- Hydro is an approved project type.
- The Project Activity is in compliance with the following applicable mandatory laws and regulations:
  - Environmental Law
  - Environmental Impact Assessment Regulation
  - Electricity Market Law
  - Electricity Licence Regulation
  - Electricity Market Balancing and Conciliation Regulation

- Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electricity Energy
- Energy Efficiency Law

VVB also confirms that project is not mandated by any enforced law, statute or other regulatory framework, and that the energy generated by project activity is not used to meet governmental targets, laws, or legal mandates. The project operates within free market conditions. The project activity is in compliance with the applicable laws and regulation and it could receive regulatory income (feed-in - tariff).

It is approved that the project has never been included in an emissions trading program or any other binding limits. It has neither received any kind of environmental credits nor been registered under any other GHG programs and the project was not rejected by any other GHG program before Moreover, there is not another form of environmental credit generated by the project.

Based on the information mentioned above, Re Carbon Ltd. confirms that the description of the Project Activity in PD – version 1 is accurate, complete, and provides an understanding of the nature of the project.

3.2 Safeguards

3.2.1 No Net Harm

It is confirmed by Re Carbon Ltd. that the project is implemented in line with the environmental law and related regulations. Also, it is understood from the desk reviews and interviews that the project does not have an environmental and social negative impact.

The project activity is not on forest land. There are agricultural lands around the project area; however, since the project is constructed on water and, no reservoir, no negative impacts are expected on agricultural land.

There is not any CARs or CLs in this aspect.

3.2.2 Environmental Impact

Re Carbon Ltd. confirms that the Project Activity reduces the GHG emissions in Turkey compared to the baseline scenario. This situation contributes to SDG7, Affordable and clean energy.

As it can be approved from the organizational chart examined and the interviews conducted, the project creates employment during the construction and the operation phase of the plant. This situation contributes SDG8, Decent work and economic growth.

Through renewable technologies and hydro-based electricity sustainable and climate friendly development is promoted. This situation contributes to SDG13, Climate Action.

The domestic law and regulation do not require any environmental impact assessment.

For the “Environmental Impact” section in PD, which is provided by PP, it requested by Re Carbon Ltd. that the project contribution to SDG7 should be specified. Besides this, “EIA is not required” document was signed at 21/09/2003.

3.2.3 Local Stakeholder Consultation

As confirmed in the remote audit made on 10/09/2021, the Project has resulted in the creation of new jobs in the project region and improvement in local roads, contributing to living standards in the region. The project owner helped local people and the institutions in many ways. There was no specific environmental problem that concerned the locals. The Mukhtars of Karagedik village mentioned that they have the contact information for the plant responsible, and the project owner and local community are always in touch. If there is a complaint or a request, the project owner checks with the Mukhtar on a regular basis. No complaint has been received by the participants of the remote audit.

There is not any CARs or CLs in this aspect.

3.2.4 Public Comments

In compliance with the World Bank Operational Manual, the stakeholder meeting was organized in Karagedik Village on 10/04/2009. The meeting was recorded via handy cam and an official written record was signed by the village heads in the project region.

It is confirmed by Re Carbon Ltd. during the desk review, residents in the village were informed about the event through the village heads of Karagedik, Karatepe and Nohuttepe. The overall response to the project was positive. The answers provided by the project team were accepted as satisfactory.

There is not any CARs or CLs in this aspect.

3.3 Application of Methodology

3.3.1 Title and Reference

It is validated by Re Carbon Ltd. that the following applied baseline and monitoring methodologies and their related tools are applied accurate and they are valid at the time of validation:

ACM0002: Grid-connected electricity generation from renewable sources – version 20.0

TOOL07: Tool to calculate the emission factor for an electricity system – version 07.0

TOOL11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period – version 03.0.1

TOOL10: Tool to determine the remaining lifetime of equipment – version01”.

3.3.2 Applicability

During the desk review and remote audit interviews, it is confirmed that the project is installation of a new power plant at a site where there was no renewable energy power plant operating prior to the implementation of the project activity.

There is no project emission resulting from the reservoir area of the Project Activity as the power density of the project is greater than 10W/m2.

The project is greenfield hydropower plant and does not have non-renewable components and is a large-scale project activity.

The project does not involve the capacity addition and retrofit, rehabilitation or replacement.

Therefore, the methodology ACM0002: Grid-connected electricity generation from renewable sources is applicable and PP is used the latest version of the methodology and relevant tools.

Therefore, it is confirmed by the validation team members, all the applicability conditions of the methodology have been justified appropriately in the PD (dated 12/12/2022 v05).

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3.3.3 Project Boundary

The project supplies electricity to the Turkish grid, which has been validated based on the electricity generation license.

The dominant emissions from power plants are in the form of CO2, therefore CO2 emissions from fossil fuel fired power plants connected to the grid will be accounted for in baseline calculations. Other emissions are not accounted for. There are no non renewable components on site.

Single line diagram of the project has been seen and project site audited remotely.

All the units of the project activity are in line with the requirements of the baseline methodology applied, “ACM0002: Grid-connected electricity generation from renewable sources, Version 20.0”.

Moreover, it is confirmed by Re Carbon Ltd. that the project boundary is expressed accurately in PD by examining Google Earth for the project.

3.3.4 Baseline Scenario

The project activity was earlier registered using the methodology ACM0002, Version 12.1.0. All the applicability conditions of the methodology have been justified appropriately in the PD for the second crediting period (version 5 dated 12/12/2022).

The PP has also included “Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period version 03.0.1” under the applicable tools list. The DOE confirms that the application is applied correctly.

There has been no significant change in the relevant policies and circumstances, which would impact the baseline scenario since 02/02/2011 (date of the first validation report) till date.

The project activity supplies power to the Turkish national grid. Thus, the baseline scenario continues to remain same as earlier, as follows: “Electricity delivered to the grid by the project activity that otherwise would have been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined

margin (CM) calculations described in the "Tool to calculate the emission factor for an electricity system".

The emission factor has been updated for the 2nd renewable crediting period. The procedures as defined in the "Tool to calculate the emission factor for an electricity system", version 07.0 have been followed. The emission coefficient in the earlier PD was 0.615 tCO2/MWh. The emission coefficient in the updated PD is 0.4929 tCO2/MWh, which is the grid emission factor value corresponds to the latest official emission factor of Turkey published by Ministry of Energy and Natural Resources.

No updates in policy and regulatory framework have been found in Turkey. The current baseline has been updated with the latest data and projections available by the official bodies. Hence, the baseline scenario is still valid for the second crediting period and continues to be the same as during the first crediting period.

3.3.5 Additionality

The additionality of the project had earlier been demonstrated using the "Tool for the Demonstration and Assessment of Additionality", version 05.2. In accordance with additionality tool, identification of alternatives, compliance with national regulations, investment analysis, barrier analysis and common practice analysis have been checked by the validation team through document review and remote interview. The project activity is in compliance with the applicable laws and regulations and it could receive regulatory income (feed-in - tariff).

Re Carbon Ltd. confirms that all data, rationales, assumptions and justifications presented in the PD and documentation provided by PPs to support the demonstration of additionality are reliable and credible.

3.3.6 Quantification of GHG Emission Reductions and Removals

The emission reduction calculation estimations have been done in the PD as per the latest approved version of the methodology ACM0002, Version 20. The combined margin (CM) emission factor of Turkish National Transmission System has been published by the Ministry of Energy and Natural Resources. The latest values belong to the 2019 statistics. (https://enerji.gov.tr/Media/Dizin/EVCED/tr/%C3%87evreVe%C4%B0klim/%C4%B0klimDe%C4%9Fi%C5%9Fikli%C4%9Fi/T%C3%BCrkiyeUlusalElektrik%C5%9EebekesiEmisyonFakt%C3%B6r%C3%BC/Belgeler/EK-2.pdf)

The document refers to calculation of the grid emission factor based on the "Tool to Calculate the Emission Factor for an Electricity System, version 07.0". It is the latest version of the tool, therefore it is accepted by DOE.

The baseline emissions are calculated based on the emission coefficient multiplied by the expected net electricity generation, which amounts to 239,946 MWh per annum.

Option A: A combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) is calculated according to the procedures prescribed in the 'Tool to calculate the emission factor for an electricity system'. All other projects than wind and solar power generation project activities wOM = 0.5 and wBM = 0.5 for the first crediting period, and

wOM = 0.25 and wBM = 0.75 for the second and third crediting period. Therefore wOM = 0.25 and wBM = 0.75 have been considered for the second crediting period.

The OM is taken as 0.7258 tCO2/MWh.
The BM is taken as 0.4153 tCO2/MWh.
CM is is taken as 0.4929.

Accordingly, the baseline emissions BEy are calculated as following:
BEy = EGy x EFgrid, CM, y
Where:

BEy	: Baseline emissions (tCO2e)
EGy	: Annual electricity supplied by the project to the grid (MWh)
EFgrid, CM, y	: Baseline emission factor (tCO2e/MWh)
y	: Refers to a given year

239,946 MWh X 0.4929 = 118,275 tCO2/year

There are no project or leakage emissions associated with the Project Activity. Thus, the emission reductions correspond to the baseline emissions. The project is expected to result in an average emission reduction of 118,275 tCO2/year during the second renewable crediting period.

As a result, the methodology and its related tool have been taken in the latest version and applied correctly. Also, the data are chosen appropriately. Therefore, DOE confirms the calculation of GHG Emission Reductions and Removals for the Project Activity.

3.3.7 Methodology Deviations

There are no methodology deviations.

3.3.8 Monitoring Plan

The monitoring plan has been applied in the PD as per the methodology ACM0002, version 12.1.0 which is used in the first validation period. The emission coefficient of the grid has taken as 0.4929 based on the published document of Ministry of Energy and Natural Resources. This number has been calculated based on “Tool to calculate the emission factor for an electricity system” as declared by the Ministry of Energy of Turkey. The use of the number is correct and is in line with CDM requirements. As per the applied methodology, the only monitoring parameter is the amount of electricity fed into the grid by the Project Activity.

There are eight electricity meters, four main meters and four back up meters. All meters are inspected and sealed by TEIAS before the commissioning of the power plant in order to be protected from interference by any of the parties and the relevant information about the

electricity meters including the serial numbers have been provided by the PP. The features of the meters are as follows:

For Oşkan HPP:

Unit 1	Main Meter	Back-up Meter
Brand	EMH	EMH
Serial Number	8923872	8923873
Latest Test Date of the Meters	14.10.2019	14.10.2019
Accuracy Class	0.5 S	0.5 S

Unit 2	Main Meter	Back-up Meter
Brand	EMH	EMH
Serial Number	8923874	8923875
Latest Test Date of the Meters	14.10.2019	14.10.2019
Accuracy Class	0.5 S	0.5 S

Unit 3	Main Meter	Back-up Meter
Brand	EMH	EMH
Serial Number	8923876	84260477
Latest Test Date of the Meters	14.10.2019	14.10.2019
Accuracy Class	0.5 S	0.5 S

For Berkman HPP:

	Main Meter	Back-up Meter

Brand	EMH	EMH
Serial Number	8923878	8923879
Latest Test Date of the Meters	14.10.2019	14.10.2019
Accuracy Class	0.5 S	0.5 S

Meters have been validated via photos provided from site. Accuracy classes are defined as 0.5S class. The calibration is implemented in accordance with the related standard procedures (IEC-EN 62053-22 and 62053-23) by either Turkish Electricity Transmission Corporation (TEIAS) or the provider company in the name of TEIAS.

All data will be kept for at least two years after the crediting period for QA/QC purposes.

Re Carbon Ltd. can confirm that the list of parameters that need to be monitored is complete and consistent with ACM0002 and that the monitoring plan is in compliance with the applied monitoring methodology.

By document review and interview with project owner, it is confirmed by the validation team that the monitoring plan is properly implemented, and all monitoring arrangements are feasible within the project design, and the means of implementation of the monitoring plan, including data management and quality assurance and quality control procedures, are sufficient to ensure that the ERs to be achieved by the project activity is properly reported and verified.

3.4 Non-Permanence Risk Analysis

Not Applicable.

4 VALIDATION CONCLUSION

Re Carbon Ltd. has performed the validation of the “Ceyhan 61.7 MW Hydropower Project” in “Turkey” between 01/09/2021 and 29/04/2022. The validation was performed on the basis of VCS criteria, UNFCCC criteria for the CDM and Host Party criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The validation has been performed by a validation team consisting of “Fikriye Seda Atabek (TL), Öykü Yakupoğlu (Validator) and Sandeep Kanda (ITR)”, and the project activity was checked against the applicable rules and regulations of CDM including CDM Validation and Verification Standard version 3.0, CDM Project Standard version 3.0 and CDM Project Cycle Procedure version 3.0, VCS version 4.0 and VCS Standard 4.2.

Re Carbon Ltd. hereby confirms that the proposed project activity “Ceyhan 61.7 MW Hydropower Project” in Turkey, has applied all relevant EB-guidance as the selected baseline and monitoring methodologies and the associated methodological tools have been applied correctly. Total emission reductions from the project are estimated to be on the average 118,275 tCO_2e per year over the selected 10 year crediting period. The emission reduction forecast has been checked and it is deemed likely that the stated amount is achieved given that the underlying assumptions do not change.

As a result, the validation team assigned by the Re Carbon Ltd. concludes that the proposed Project Activity “Ceyhan 61.7 MW Hydropower Project” in Turkey, as described in the PD (version 5 and 12/12/2022)

- meets all relevant Host Country criteria;
- meets all relevant requirements of the VCS project activities [including VCS version 4.0, Article 12 of the Kyoto Protocol, the Modalities and Procedures for CDM (Marrakesh Accords) and the subsequent decisions and guidance by the COP/MOP and the CDM Executive Board];
- applies correctly the baseline and monitoring methodology “ACM0002: Grid-connected electricity generation from renewable sources – version 20.0”;
- its additionality is sufficiently justified in the PD;
- is likely to achieve estimated emission reductions;

Therefore, Re Carbon Ltd. requests the registration of the proposed project activity as a VCS project activity.



Fikriye Seda ATABEK	Sandeep KANDA	Esin TUNALI
Team Leader	ITR	Certification Manager
12/12/2022	12/12/2022	12/12/2022

ANNEX 1: VALIDATION PROTOCOL

Table 1 – VCS Project Description and CDM Validation Requirements

Question	Reference	Means of validation*	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	All items in the box at the bottom of the cover page are Arial 10.5 pt, black, regular (non-italic) font.	OK	OK
2. Are the followings provided at the cover page in a tabular format?	VCS Std. Version 4.0	DR	Please see below.	OK	OK
2.1. Name of the project?	VCS Std. Version 4.0	DR	Please revise project name not as “Ceyhan HEPP project” but like in the registry.	CAR-1	OK
2.2. Version number of the VCS PD?	VCS Std. Version 4.0	DR	PD version stated as v1.	OK	OK
2.3. The date of the document issued in DD-Month-YYYY format?	VCS Std. Version 4.0	DR	01/09/2021	OK	OK
2.4. Individual or entity that prepared the document?	VCS Std. Version 4.0	DR	Sekans Danışmanlık	OK	OK
2.5. Physical address, telephone, email, website?	VCS Std. Version 4.0	DR	The contact is indicated properly.	OK	OK
3. Is this box available on the title page of the final document?	VCS Std. Version 4.0	DR	The box is available.	OK	OK
4. Is the PD used as a basis for validation prepared in accordance with the latest template and guidance from the VCS?	VCS Std. Version 4.0	DR	The PD is the latest template and guidance from the VCS according to the PD submitted date.	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
5. Are the VCS PD and other documents required under the VCS Program in English?	VCS Std. Version 4.0	DR	They are all in English.	OK	OK
6. Is there “Table of Contents” in the PD?	VCS Std. Version 4.0	DR	There is “Table of Contents” in the PD.	OK	OK
7. Is the project listed on VCS project pipeline? .)	Registration and Issuance Process Procedure Version 3.8 Section 3	DR	Yes	OK	OK
1. PROJECT DETAILS					
1.1. **Summary Description of the Implementation Status of the Project**					
1.1.1. Does section 1.1 of the VCS PD include the following?	VCS Std. Version 4.0	DR	Please see below.	OK	OK
1.1.1.1. A summary description of the technologies/measures to be implemented by the project.	VCS Std. Version 4.0	DR	a)Berkman HPP commissioning acceptance dates (for each units) are stated as 20/08/2010, 15/02/2012, 28/08/2010, respectively, in the commissioning documents. It should be added that the Berkman HPP operation start date is due to the start of operation of the first unit for clarification. b) Please show indices for Mwe and MWm in all PDD c) Please show reference for 239,946 MWh electricity per year, if number is wrong please revise excel and PD accordingly. d)Please show reference for 100.2481 GWh and 239,946	CAR-2	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
			MWh.		
1.1.1.2. The location of the project.	VCS Std. Version 4.0	DR	The location of the project is stated properly.	OK	OK
1.1.1.3. An explanation of how the project is expected to generate GHG emission reductions or removals.	VCS Std. Version 4.0	DR	Yes	OK	OK
1.1.1.4. A brief description of the scenario existing prior to the implementation of the project.	VCS Std. Version 4.0	DR	It should be stated that the project activity is a greenfield project in this section as well.	CL-1	OK
1.1.1.5. An estimate of annual average and total GHG emission reductions and removals.	VCS Std. Version 4.0	DR	The way of calculating electricity generation is not stated in the PD as “Electricity generation projection has been made for every 5 years according to historical flow data of the river and future flows of upstream dams. Thus this figure reflects the average generation projection between the years 2010-2030.” It should be added.	CL-2	OK
1.1.2. Is the purpose of the project activity described including how it contributes to the sustainable development of the Host Party?	CDM-PDD-FORM version 11.0 EB 101 Report Annex 1 §36c	DR	The purpose of the project activity is described appropriately.	OK	OK
1.1.3. Has the VCS PD been prepared in accordance with the latest guidelines for completing the VCS PD?	VCS Std. Version 4.0	DR	Yes	OK	OK
1.2. **Sectoral Scope and Project Type**					
1.2.1. Is this a grouped project?	VCS Std.	DR	No	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
	Version 4.0				
1.2.2. Is the technical area of the project activity specified?	VCS Std. Version 4.0	DR	Yes	OK	OK
1.2.3. Is the category of the project activity specified?	VCS Version 4.0	DR	Yes	OK	OK
1.2.4. Is it justified how the proposed project activity conforms to the project category selected?	CDM-PDD-FORM Version 11.0 VCS Std. Version 4.0	DR	Yes	OK	OK
1.3. **Project Eligibility**					
1.3.1. Has it been described and justified how the project is eligible under the scope of the VCS Program?	VCS Version 4.0	DR	Yes	OK	OK
1.4. **Project Design**					
1.4.1. Has it been indicated whether the project has been designed to include one of the following?	VCS Version 4.0	DR	It is stated that the project activity is a single installation of an activity.	OK	OK
1.4.1.1. A single installation of an activity	VCS Version 4.0	DR	Please see above.	OK	OK
1.4.1.2. Multiple project activity instances or	VCS Version 4.0	DR	Please see above.	OK	OK
1.4.1.3. Grouped project.	VCS Version 4.0	DR	Please see above.	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
1.5. **Project Proponent**					
1.5.1. Are the contact information for the project proponent(s) provided?	VCS Std. Version 4.0	DR	The contact information for PP is provided.	OK	OK
1.6. **Other Entities Involved in The Project**					
1.6.1. 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	The contact information of Sekans Danışmanlık is provided.	OK	OK
1.7. **Ownership**					
1.7.1. Has the evidence of project ownership been provided in accordance with the VCS Program specifications on project ownership?	VCS Std. Version 4.0	DR	Yes	OK	OK
1.8. **Project Start Date**					
1.8.1. 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 Version 4.0	DR	The project start date is indicated.	OK	OK
1.8.2. Is the starting date defined in accordance with the relevant guidance?	CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
1.8.3. Does the VCS PD include a description on the following?	CDM-PDD-FORM Version	DR	Please see below.		

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
	11.0				
1.8.3.1. how this starting date has been determined?	CDM-PDD-FORM Version 11.0	DR	The start date of the operation of Oşkan HPP according to the commissioning document	OK	OK
1.8.3.2. the evidence available to support this start date?	VCS Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
1.9. **Project Crediting Period**					
1.9.1. Is the total crediting period including the day, month and year for the start and end dates and the total number of years indicated?	VCS Std. Version 4.0	DR	a)The first crediting period is given in the PD. It should be clarified with adding the sentence “It is the first crediting period.” b)The reason why the crediting period is taken as 8 years instead of 10 years should be stated. c) In PDD 1.9 please state that “03 June 2010 to 02 June 2020” is CP 1	CAR-3	OK
1.10. **Project Scale and Estimated GHG Emission Reductions or Removals**					
1.10.1. Is the scale of the project (project or large project) indicated?	VCS Std. Version 4.0	DR	Large project	OK	OK
1.10.2. Are the estimated annual GHG emission reductions or removals during the project crediting period indicated in a tabular format?	VCS Std. Version 4.0	DR	For the year 2024, it should be 137,288 tCO2. Also, between 01.01.2028 - 02.06.2028 it should be 57,608. Because February has 29 days in 2024 and 2028. The total estimation value should also be adjusted accordingly.	CAR-4	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
			Also, the total crediting period is stated as 10 years, but the calculation covers 8 years. It should be corrected.		
1.11. **Description of the Project Activity**					
1.11.1. Does the proposed VCS project activity involve the alteration of an existing installation or process?	EB 101 Report Annex 2 §51	DR	The reason for the electricity generation of HPPs is indicated as “depending on the water flow.” But these estimated values are taken from the PD which belongs to first crediting period and it is stated in that PD as “Electricity generation projection has been made for every 5 years according to historical flow data of the river and future flows of upstream dams. Thus this figure reflects the average generation projection between the years 2010-2030.” This expression should be added.	CAR-5	OK
1.11.2. If the proposed project activity includes the alteration of an existing installation or process does the project description clearly state the differences resulting from the project activity compared to the pre-project situation?	EB 101 Report Annex 2 §51	DR	N/A	OK	OK
1.11.3. Does the VCS PD include the following?	CDM-PDD-FORM Version 11.0	DR	Please see below.	OK	OK
1.11.3.1. The scenario existing prior to the start of the project activity with a list of equipment and systems in operation at that time	CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
1.11.3.2. The scope of	CDM-PDD-	DR	Yes	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
activities/measures that are being implemented within the project activity, with a list of the equipment(s) and systems that will be installed and/or modified within the project activity;	FORM Version 11.0				
1.11.3.3. The baseline scenario (if same as the scenario existing prior to implementation, then it should only be stated that both scenarios are the same)	CDM-PDD-FORM Version 11.0	DR	The Baseline Scenario is detailed in section 3.4 in PD.	OK	OK
1.11.4. Does the description of the scenarios include the following:	CDM-PDD-FORM Version 11.0	DR	Please see below.	OK	OK
1.11.4.1. A list and arrangement of the main manufacturing / production technologies, systems and equipment involved	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
1.11.4.2. The emission sources and GHGs involved in the project activity, according to the methodology used	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	N/A	OK	OK
1.11.4.3. The description of the functions of the equipment that is being modified and/or installed under the project activity and its relation, if any, to other manufacturing/production equipment and systems outside the project boundary	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
1.11.5. Is the lifetime of the project activity(s) indicated?	VCS Std. Version 4.0	DR	The lifetime of the project activity is not indicated. It should be added.	CL-3	OK
1.11.6. Has the appropriate and clear evidence been provided regarding the expected operational lifetime of the project activity?	CDM-PDD-FORM Version 11.0	DR	Refer above	OK	OK
1.12. **Project Location**					
1.12.1. Is the location and geographical boundary of the project activity clearly identified including:	CDM-PDD-FORM Version 11.0 VCS Std. Version 4.0	DR	Please see below.	OK	OK
1.12.1.1. Host Party(ies)?	CDM-PDD-FORM Version 11.0 VCS Std. Version 4.0	DR	Enova Enerji ve Üretim A.Ş.	OK	OK
1.12.1.2. Region/State/Province etc.?	CDM-PDD-FORM Version 11.0 VCS Std. Version 4.0	DR	South Anatolian region of Turkey	OK	OK
1.12.1.3. City/Town/Community etc.?	CDM-PDD-FORM Version 11.0 VCS Std. Version 4.0	DR	Osmaniye city	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
1.12.1.4. a set of geodetic coordinates.	VCS Std. Version 4.0	DR	For Oşkan HPP: 37.224463 North, 36.252444 For Berkman HPP are 37.168667 North and 36.233742 East.	OK	OK
1.13. **Conditions Prior to Project Initiation**					
1.13.1. Are the conditions prior to project initiation provided?	VCS Std. Version 4.0	DR	Section 3.4 in PD	OK	OK
1.13.2. Is it demonstrated that the project has not been implemented to generate GHG emissions for the purpose of their subsequent reduction, removal or destruction?	VCS Std. Version 4.0	DR	Section 3.4 in PD	OK	OK
1.14. **Compliance with Laws, Statutes And Other Regulatory Frameworks**					
1.14.1. Does the VCS PD include identification of relevant local, regional and national laws, statutes and regulatory frameworks related to the project and demonstration of compliance with them?	VCS Std. Version 4.0	DR	Yes	OK	OK
1.15. **Participation Under Other GHG Programs**					
1.15.1. **Projects Registered (or seeking registration) Under Other GHG Program(s)**					
1.15.1.1. Has it been indicated whether the project has been	VCS Std. Version 4.0	DR	Yes	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
registered, or is seeking registration under any other GHG programs in the Section 1.15.1 of the PD?					
1.15.1.2. If the project has been registered under any other GHG program, has the registration number and the relevant details been provided in the Section 1.15.1 of the PD?	VCS Std. Version 4.0	DR	N/A	OK	OK
1.15.2. **Projects Rejected by Other GHG Programs**					
1.15.2.1. Has it been indicated whether the project has been rejected by any other GHG programs in the Section 1.15.2 of the PD?	VCS Std. Version 4.0	DR	Yes	OK	OK
1.15.2.2. If the project has been rejected by any other GHG programs, has the relevant information, including the reason(s) for the rejection and justification of eligibility under the VCS Program been provided in the Section 1.15.2 of the PD?	VCS Std. Version 4.0	DR	N/A	OK	OK
1.15.2.2.1. the reductions or removals generated by the project have or will not be used in the emissions trading program	VCS Std. Version 4.0	DR	The project has never been included in an emissions trading program.	OK	OK
1.15.2.2.2. for the purpose of demonstrating compliance	VCS Std. Version 4.0	DR	The project has never been included in any other binding limits.	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
with the binding limits that are in place in that jurisdiction or sector					
1.16. **Other Forms of Environmental Credit**					
1.16.1. **Emissions Trading Programs and Other Binding Limits**					
1.16.1.1. Has it been indicated whether the project reduces through following?	VCS Std. Version 4.0	DR	Please see below.	OK	OK
1.16.1.1.1. GHG emissions from activities that are included in an emissions trading program or	VCS Std. Version 4.0	DR	N/A	OK	OK
1.16.1.1.2. Any other mechanism that includes GHG allowance trading, and include details about any such programs or mechanisms	VCS Std. Version 4.0	DR	N/A	OK	OK
1.16.2. **Other Forms of Environmental Credit**					
1.16.2.1. Has it been indicated whether the project(s) created other forms of environmental credit including renewable energy certificates?	VCS Std. Version 4.0	DR	There is not another form of environmental credit generated by the project	OK	OK
1.16.2.2. If the project(s) created other forms of environmental credit (for example renewable	VCS Std. Version 4.0	DR	N/A	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
energy certificates), has the PPs provided all relevant information about the GHG-related environmental credit and the related program?					
1.16.2.3. 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	N/A	OK	OK
1.17. **Additional Information Relevant to the Project**	**This section of the PD is not reviewed as the project is under validation for renewal of crediting period.**				
2. SAFEGUARDS					
2.1.**No Net Harm**					
2.1.1. Has any potential negative environmental and socio-economic impacts and the steps taken to mitigate them been summarized in the VCS PD?	VCS Std. Version 4.0	DR	There is not any potential negative environmental and socio-economic impacts.	OK	OK
2.2.**Local Stakeholder Consultation**					
2.2.1. Does the process for and the outcomes from the local stakeholder consultation include the following?	VCS Std. Version 4.0	DR	Please see below.	OK	OK
2.2.1.1. The procedures or methods used for engaging local stakeholders (e.g., dates	VCS Std. Version 4.0	DR	Yes	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
of announcements or meetings, periods during which input was sought).					
2.2.1.2. The procedures or methods used for documenting the outcomes of the local stakeholder consultation	VCS Std. Version 4.0	DR	Yes	OK	OK
2.2.1.3. The mechanism for on-going communication with local stakeholders	VCS Std. Version 4.0	DR	Yes	OK	OK
2.2.1.4. How due account of all and any input received during the consultation has been taken.	VCS Std. Version 4.0	DR	"The meeting was recorded via handy cam and an official written record was signed by the village heads in the project region." is stated in the PD which belongs to first crediting period. This statement should be added in this PD as well.	CL-4	OK
2.2.1.5. The details on any updates to the project design or justify why updates are not appropriate	VCS Std. Version 4.0	DR	Yes	OK	OK
2.2.2. Is the invitation made in an open and transparent manner with use of appropriate means?	CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
2.2.3. Is it possible to conclude based on stakeholder meeting presentation materials that project was described in an understandable manner to the local stakeholders?	CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
2.2.4. Is the local stakeholder process completed before the validation?	VCS Std. Version 4.0	DR	Yes	OK	OK
		DR	Please revise first sentence in 2.2 of MR	CAR-6	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
2.3. **Environmental Impacts**					
2.3.1. Have the PPs carried out an analysis of the environmental impacts of the proposed project activity including transboundary impacts?	VCS Std. Version 4.0 EB101 Report Annex 1 §92	DR	Yes	OK	OK
2.3.2. Has a summary of the analysis of the environmental impacts of the project activity and references to all related documentation, provided under PD?	CDM-PDD-FORM version 11.0 EB101 Report Annex 1 §92	DR	Yes	OK	OK
2.3.3. Has the PPs provided all conclusions and references to all related documentation?	EB101 Report Annex 1 §92	DR	"EIA is not required" date appears as 06/06/2002 in the document. It is stated as August 2003 in PD. This contradictory should be corrected.	CAR-7	OK
2.3.4. Do the procedures of the Host Party require the PPs to conduct an environmental impact assessment?	EB101 Report Annex 1 §92 EB101 Report Annex 2 §126	DR	The domestic law and regulation do not require any environmental impact assessment.	OK	OK
2.3.5. If the procedures of the Host Party require the PPs to conduct an environmental impact assessment, has the PPs conducted an environmental impact assessment in accordance with the Host Party's	EB101 Report Annex 1 §93 EB101 Report	DR	"EIA is not required" document is taken.	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
procedures?	Annex 2 §127 §129				
2.4. **Public Comments**					
2.4.1. Has it been demonstrated in the VCS PD how due account of all and any comments received during the public comment period had been taken?	VCS Std. Version 4.0	DR	Yes	OK	OK
2.4.2. Have the details on any updates to the project design or demonstrate the insignificance or irrelevance of comments been included in the VCS PD?	VCS Std. Version 4.0	DR	N/A	OK	OK
3. APPLICATION of METHODOLOGY					
3.1. **Title and Reference of Methodology**					
3.1.1. Does the project apply the correct and valid version of the approved methodology and referred tools at the time of submission for crediting period renewal?	VCS Std. Version 4.0	DR	Please state all relevant tools used for this CP. "Tool to determine the remaining lifetime of equipment "-version 01" should be added. Also, for the monitoring plan, ACM0002 v12.1.0 is mentioned, please revise	CAR-8	OK
3.1.2. Does the VCS PD indicate the title and version of the methodology and the related tool(s) correctly?	VCS Std. Version 4.0	DR	Referred above	OK	OK
3.2. **Applicability of Methodology**					

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.2.1. Is the choice of the methodology justified by showing that the proposed project activity meets all the applicability conditions of the methodology?	VCS Std. Version 4.0 CDM-PDD-FORM version 11.0 EB 101 Report Annex 1 §54 EB 101 Report Annex 2 §67	DR	Yes	OK	OK
3.2.2. Does the project activity meet each of the applicability conditions of the tools or other methodology components referred to in the applied methodology?	VCS Std. Version 4.0 EB 101 Report Annex 2 §67	DR	Yes	OK	OK
ACM 0002					
3.2.3. Is the type of proposed project activity defined?	ACM 0002 Version 20.0	DR	Renewable Energy	OK	OK
3.2.4. If the proposed project activity is a hydro power plant project, does one of the following conditions conform to the proposed project activity?	ACM 0002 Version 20.0	DR	Please see below.	OK	OK
3.2.4.1. Is the proposed project activity implemented in an existing single or multiple reservoirs, with no change in the volume of any of the reservoirs?	ACM 0002 Version 20.0	DR	The project is run-of-river hydropower plant.	OK	OK
3.2.4.2. Is the project activity implemented in an existing single	ACM 0002	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density calculated using equation (3), is greater than 4 W/m2?	Version 20.0				
3.2.4.3. Is the project activity results in new single or multiple reservoirs and the power density calculated using equation (3), is greater than 4 W/m2?	ACM 0002 Version 20.0	DR	Please state power density in MR and excel	CAR-9	OK
3.2.5. If the project activity is an integrated hydro power project, has the PPs demonstrated that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project?	ACM 0002 Version 20.0	DR	N/A	OK	OK
3.2.6. If the project activity is an integrated hydro power project, has the PPs provided an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs?	ACM 0002 Version 20.0	DR	N/A	OK	OK
3.2.7. If the project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs calculated using equation (3) is lower than or equal to 4 W/m2, do all the following conditions conform the project activity?	ACM 0002 Version 20.0	DR	N/A	OK	OK
3.2.7.1. The power density calculated using the total	ACM 0002	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
installed capacity of the integrated project, as per equation (4), is greater than 4 W/m2;	Version 20.0				
3.2.7.2. Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity;	ACM 0002 Version 20.0	DR	N/A	OK	OK
3.2.7.3. Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m2 shall be:	ACM 0002 Version 20.0	DR	N/A	OK	OK
3.2.7.3.1. Lower than or equal to 15 MW; and	ACM 0002 Version 20.0	DR	N/A	OK	OK
3.2.7.3.2. Less than 10 per cent of the total installed capacity of integrated hydro power project.	ACM 0002 Version 20.0	DR	N/A	OK	OK
ACM 0001					
3.2.8. Does the project activity include one of the following conditions?	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.2.8.1. Install a new landfill gas (LFG) capture system in an existing or new (Greenfield) SWDS where no LFG capture system was or would have been installed prior to the implementation of the project activity; or	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.2.8.2. Make an investment into an existing LFG capture system to increase the recovery rate or change the use of the captured	ACM 0001 Version 19.0	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
LFG, provided that:					
3.2.8.3. The captured LFG was vented or flared and not used prior to the implementation of the project activity; and	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.2.8.4. In the case of an existing active LFG capture system for which the amount of LFG cannot be collected separately from the project system after the implementation of the project activity and its efficiency is not impacted on by the project system: historical data on the amount of LFG capture and flared is available;	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.2.8.5. Flare the LFG and/or use the captured LFG in any (combination) of the following ways:	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.2.8.6. Generating electricity;	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.2.8.7. Generating heat in a boiler, air heater or kiln (brick firing only) or glass melting furnace; and/or	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.2.8.8. Supplying the LFG to consumers through a natural gas distribution network;	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.2.8.9. Supplying compressed/liquefied LFG to consumers using trucks;	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.2.8.10. Supplying the LFG to consumers through a dedicated pipeline;	ACM 0001 Version 19.0	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.2.8.11. Do not reduce the amount of organic waste that would be recycled in the absence of the project activity.	ACM 0001 Version 19.0				
AM0058					
3.2.9. Is this a project activity that introduce a primary district heating system to supply heat to residential and commercial consumers?	AM0058 Version 5.0	DR	N/A	OK	OK
3.2.10. If this is a project activity that introduce a primary district heating system to supply heat to residential and commercial consumers, does the heat come from one of the following?	AM0058 Version 5.0	DR	N/A	OK	OK
3.2.10.1. An existing grid connected thermal power plant with no steam extraction for heating purposes, other than that required for the operation of the power plant auxiliary systems, prior to the project activity;	AM0058 Version 5.0	DR	N/A	OK	OK
3.2.10.2. A new centralised heat only boiler(s); or	AM0058 Version 5.0	DR	N/A	OK	OK
3.2.10.3. A combination of both 3.2.10.1 and 3.2.10.2	AM0058 Version 5.0	DR	N/A	OK	OK
3.2.11. Does the project activity include any of below components?	AM0058 Version 5.0	DR	N/A	OK	OK
3.2.11.1. Heat supplied to the district heating system is predominantly	AM0058 Version 5.0	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
used for heating and/or hot tap water supply for residential and/or commercial users. At the most 20 per cent of the heat may be supplied to other users, such as for industrial production processes;					
3.2.11.2. For project activities in which a co-generation plant supplies heat to the district heating system:	AM0058 Version 5.0	DR	N/A	OK	OK
3.2.11.3. The power plant is fossil fuel fired;	AM0058 Version 5.0	DR	N/A	OK	OK
3.2.11.4. Only one type of fuel is used by the project's co-generation plant (a maximum of 1 per cent of auxiliary fuel may be used for start-up.). The same type of fossil fuel is fired in the power plant in the baseline and project scenarios;	AM0058 Version 5.0	DR	N/A	OK	OK
3.2.11.5. The project activity does not lead to an increase in the technical lifetime of the power plant and does not result in any major integrated production changes at the power plant, other than the modifications required for heat extraction for the district heating.	AM0058 Version 5.0	DR	N/A	OK	OK
3.2.11.6. Emission reductions resulting from heat supply to new residential areas, in cases where more than 50% of the annual heat production originates from heat-only boilers and less than	AM0058 Version 5.0	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
50% of heat comes from the power plant within the primary district heating system;					
3.2.11.7. Emission reductions resulting from a decrease in heat losses due to the water losses or from demand-side measures (e.g. insulation of buildings, use of thermostatic valves, behavioural changes due to billing practices).	AM0058 Version 5.0	DR	N/A	OK	OK
AMS-I.D.					
3.2.12. Does the proposed project activity comprises renewable energy units such as photovoltaic, hydro, tidal/wave, wind, geothermal and renewable biomass, supplying one of the following? •	AMS I.D. Version 18.0 §2 §4 §7	DR	N/A	OK	OK
3.2.12.1. Electricity to a national or a regional grid, or	AMS I.D. Version 18.0 §2 §4 §7	DR	N/A	OK	OK
3.2.12.2. Electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling?	AMS I.D. Version 18.0 §2 §4 §7	DR	N/A	OK	OK
3.2.13. Does the new unit (proposed project activity) have both renewable and non-renewable components?	AMS I.D. Version 18.0 §6 §11	DR	N/A	OK	OK
3.2.14. Does the new unit co-fires fossil fuel?	AMS I.D.	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
	Version 18.0 §6 §7				
3.2.15. Does the proposed project activity involve the addition of renewable energy generation units at an existing renewable power generation facility?	AMS I.D. Version 18.0 §8	DR	N/A	OK	OK
3.2.16. Is the project activity a retrofit, rehabilitation or a replacement?	AMS I.D. Version 18.0 §9	DR	N/A	OK	OK
3.2.17. If the proposed project activity is a hydro power plant project, does one of the following conditions conform to the proposed project activity?	AMS I.D. Version 18.0 §5	DR	N/A	OK	OK
3.2.18. Is the proposed project activity implemented in an existing reservoir, with no change in the volume of reservoir?	AMS I.D. Version 18.0 §5	DR	N/A	OK	OK
3.2.19. Is the project activity implemented in an existing reservoir, where the volume of reservoir is increased and the power density of the project activity, as per the definitions given in the project emissions section, is greater than 4 W/m^2?	AMS I.D. Version 18.0 §5	DR	N/A	OK	OK
3.2.20. Is the project activity results in new reservoirs and the power density of the power plant, as per the definitions given in the project emissions section, is greater than 4 W/m2?	AMS I.D. Version 18.0 §5	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
AMS I.C.					
3.2.21. Does the proposed project activity comprise renewable energy technologies that supply users (residential, industrial or commercial facilities) with thermal energy that displaces fossil fuel use?	AMS I.C. Version 21 §2	DR	N/A	OK	OK
3.2.22. Is the proposed project activity a biomass based co-generation or trigeneration system?	AMS I.C. Version 21 §3 §22-a §22-b	DR	N/A	OK	OK
3.2.23. If the proposed project activity is a biomass based co-generation system, does the proposed project activity produce heat and power in separate element processes?	AMS I.C. Version 21 §22-a	DR	N/A	OK	OK
3.2.24. If the proposed project activity is a biomass based trigeneration system, does the proposed project activity produce electrical energy and thermal energy in separate element processes?	AMS I.C. Version 21 §22-b §22-d	DR	N/A	OK	OK
3.2.25. If the proposed project activity is a biomass based co-generation system, does the emission reductions accrue from one of the following activities?	AMS I.C. Version 21 §4	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.2.25.1. Electricity supply to a grid	AMS I.C. Version 21 §4-a	DR	N/A	OK	OK
3.2.25.2. Electricity and/or thermal energy (steam or heat) production for on-site consumption or for consumption by other facilities,	AMS I.C. Version 21 §4-b	DR	N/A	OK	OK
3.2.25.3. Combination of both	AMS I.C. Version 21 §4-c	DR	N/A	OK	OK
3.2.26. If the proposed project activity is a biomass based co-generation or trigeneration system, is the total capacity of the project activity remain under the below stated limits?	AMS I.C. Version 21 §9	DR	N/A	OK	OK
3.2.26.1. 45 MW thermal if the project activity includes emission reductions from both the thermal and electrical energy components	AMS I.C. Version 21 §9-a	DR	N/A	OK	OK
3.2.26.2. 45 MW thermal if the emission reductions are solely on account of thermal energy production (i.e. no emission reductions accrue from the electricity component)	AMS I.C. Version 21 §9-b	DR	N/A	OK	OK
3.2.26.3. 15 MW if the emission reductions are solely on account of electrical energy production (i.e. no emission reductions accrue from the thermal energy	AMS I.C. Version 21	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
component),	§9-c				
3.2.27. Is the total installed/rated thermal energy generation capacity of the project equipment equal to or less than 45 MW thermal?	AMS I.C. Version 21 §7	DR	N/A	OK	OK
3.2.28. Is the project activity a co-fired system?	AMS I.C. Version 21 §8 §22-e	DR	N/A	OK	OK
3.2.29. If the proposed project activity is a co-fired system, does the total installed thermal energy generation capacity of the project equipment, when using both fossil and renewable fuel, exceed 45 MW thermal?	AMS I.C. Version 21 §8	DR	N/A	OK	OK
3.2.30. Does the project activity involve the addition of renewable energy units at an existing renewable energy facility?	AMS I.C. Version 21 §10	DR	N/A	OK	OK
3.2.31. If the project activity involve the addition of renewable energy units at an existing renewable energy facility, does the total capacity of the units added remain under the limits (45 MW thermal or 15 MWelecrical) and are the units added physically distinct from the existing units?	AMS I.C. Version 21 §10	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.2.32. If the project activity uses solid biomass fuel, (e.g. briquette), is it demonstrated that it has been produced using solely renewable biomass?	AMS I.C. Version 21 §11 §17	DR	N/A	OK	OK
3.2.33. If the producer of the solid biomass fuel is not a project participant, are the project participant and the producer bound by a contract that shall enable the project participant to monitor the source of the renewable biomass to account for any emissions associated with solid biomass fuel production?	AMS I.C. Version 21 §12	DR	N/A	OK	OK
3.2.34. If the electricity and/or steam/heat produced by the project activity is delivered to a third party, is there a contract between the supplier and consumer(s) of the energy will have to that ensures there is no double-counting of emission reductions?	AMS I.C. Version 21 §13	DR	N/A	OK	OK
3.2.35. If the project activity recovers and utilizes biogas for power/heat production, does it apply this methodology on a stand alone basis?	AMS I.C. Version 21 §14	DR	N/A	OK	OK
3.2.36. If the project activity recovers and utilizes biogas for power/heat production and applies this methodology on a stand alone basis, has the PPs taken into account any incremental emissions occurring due to the implementation of the project	AMS I.C. Version 21 §14	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
activity, as project or leakage emissions?					
3.2.37. If project equipment contains refrigerants, is the refrigerant used in the project case any ozone depleting potential?	AMS I.C. Version 21 §15	DR	N/A	OK	OK
3.2.38. If the proposed project activity is a charcoal based biomass energy generation, is the charchoal produced from renewable biomass sources?	AMS I.C. Version 21 §16	DR	N/A	OK	OK
3.2.39. If the proposed project activity is a charcoal based biomass energy generation, is the charcoal produced in kilns equipped with methane recovery and destruction facility?	AMS I.C. Version 21 §16-a	DR	N/A	OK	OK
3.2.40. If charcoal is produced in kilns not equipped with a methane recovery and destruction facility, has the PPs considered the methane emissions from the production of charcoal?	AMS I.C. Version 21 §16-b	DR	N/A	OK	OK
3.3. **Project Boundary**					
3.3.1. Is the diagram or map of the project boundary, showing clearly the physical locations of the various installations or management activities taking place as part of the project activity given?	VCS Std. Version 4.0	DR	See Section 1.12 in PD.	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.3.2. Has the PP described the emission sources and GHGs included in the project boundary for the purpose of calculating project emissions and baseline emissions, in the tabular format?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
3.3.3. Has the PP presented a flow diagram of the project boundary, physically delineating the project activity, based on the description provided in section 1.8 of the PD?	CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
3.3.4. Has the PP included in the flow diagram the equipment, systems and flows of mass and energy described in PD	CDM-PDD-FORM Version 11.0 VCS Std. Version 4.0	DR	Yes	OK	OK
3.3.5. Has it been indicated in the diagram the emission sources and GHGs included in the project boundary?	CDM-PDD-FORM Version 11.0 VCS Std. Version 4.0	DR	Yes	OK	OK
3.3.6. Does the selected methodology allow the PPs to choose whether a source or gas is to be included in the project boundary?	EB 101 Report Annex 1 §58	DR	Yes	OK	OK
3.3.7. If the selected methodology allows the project participants to choose whether a source or gas is to be included in the project boundary, do the project participants explain and justify their choices?	EB 101 Report Annex 1 §58	DR	Yes	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.3.8. Have all sources and GHGs necessary for the calculation of emissions been included within the project boundary?	EB 101 Report Annex 2 §69	DR	Yes	OK	OK
3.3.9. Does the PD correctly describe the project boundary and the physical delineation of the proposed project activity?	EB 101 Report Annex 1 §57	DR	Yes	OK	OK
3.3.10. Has the selected methodology been correctly applied with respect to project boundary?	EB 101 Report Annex 2 §63a	DR	ACM0002 is applied correctly.	OK	OK
ACM 0002					
3.3.11. Is the spatial extent of the project boundary identified correctly?	ACM 0002 Version 20.0	DR	Yes	OK	OK
3.3.12. Are the greenhouse gases and emission sources included in or excluded from the project boundary given in the tabular form as per the guidance given in Table-2 of ACM 0002?	ACM 0002 Version 20.0	DR	Yes	OK	OK
ACM 0001					
3.3.13. Does the project boundary include the following as applicable?	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.3.13.1. Sites where the LFG is flared or used (e.g. flare, power plant, boiler, air heater, glass melting furnace, kiln, natural gas distribution network, dedicated pipeline or biogas processing facility);	ACM 0001 Version 19.0	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.3.13.2. Captive power plant(s) (including emergency diesel generators) or power generation sources connected to the grid, which are supplying electricity to the project activity;	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.3.13.3. Captive power plant(s) (including emergency diesel generators) or power generation sources connected to the grid, which are supplying electricity in the baseline that is displaced by electricity generated by captured LFG in the project activity;	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.3.13.4. Heat generation equipment or sources which are supplying heat in the baseline that is displaced by heat generated by captured LFG in the project activity; and	ACM 0001 Version 19.0	DR	N/A	OK	OK
3.3.13.5. The transportation of the compressed/liquefied LFG from the biogas processing facility to consumers.	ACM 0001 Version 19.0	DR	N/A	OK	OK
AM0058					
3.3.14. Does the physical delineation of the project boundary include the following?	AM0058 Version 5.0	DR	N/A	OK	OK
3.3.14.1. For project activities in which a power plant supplies heat to the district heating network, the site of the power plant, including the heat extraction unit(s) and all interrelated production units to account for emissions resulting	AM0058 Version 5.0	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
from changes in power generation and consumption due to the project activity;					
3.3.14.2. The heat-only boilers that supply heat to the district heating system;	AM0058 Version 5.0	DR	N/A	OK	OK
3.3.14.3. The district heating system, including pipes, sub-stations and buildings that are or will be connected to the district heating system.	AM0058 Version 5.0	DR	N/A	OK	OK
3.3.15. Has it been illustrated by PP how the project boundary is defined and where the points to measure heat supplied to buildings (Qe and Qn) should be located in line with the Figure-1 in AM0058?	AM0058 Version 5.0	DR	N/A	OK	OK
3.3.16. Are the emissions sources included in or excluded from the project boundary indicated in the PD in line with the Table-2 of the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
AMS-I.D.					
3.3.17. Is the spatial extent of the project boundary identified correctly?	AMS I.D. Version 18.0 §18	DR	N/A	OK	OK
AMS I.C.					
3.3.18. Does the spatial extent of the project boundary encompass the following?	AMS I.C. Version 21 §24	DR	N/A	OK	OK
3.3.18.1. All plants generating electricity and/or thermal energy located at the project site,	AMS I.C. Version 21	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
whether fired with biomass, fossil fuels or a combination of both	§24-a				
3.3.18.2. All power plants connected physically to the electricity system (grid) that the project plant is connected to	AMS I.C. Version 21 §24-b	DR	N/A	OK	OK
3.3.18.3. Industrial, commercial or residential facility, or facilities, consuming energy generated by the system and the processes or equipment affected by the project activity	AMS I.C. Version 21 §24-c	DR	N/A	OK	OK
3.3.18.4. The processing plant of biomass residues, for project activities using solid biomass fuel (e.g. briquette), unless all associated emissions are accounted for as leakage emissions or are part of an independently registered CDM project;	AMS I.C. Version 21 §24-d	DR	N/A	OK	OK
3.3.18.5. The geographic boundaries of the dedicated plantations if the feedstock is biomass produced in dedicated plantations;	AMS I.C. Version 21 §24-e	DR	N/A	OK	OK
3.3.18.6. The transportation itineraries, if the biomass is transported over distances greater than 200 kilometres, unless all associated emissions are accounted for as leakage emissions;	AMS I.C. Version 21 §24-f	DR	N/A	OK	OK
3.3.18.7. The site of the anaerobic digester in the case of project activity that recovers and utilizes	AMS I.C. Version 21	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
biogas for producing electricity and/or thermal energy and applies this methodology on a stand-alone basis, i.e. without using a Type III component of a SSC methodology.	§24-g				
3.4. **Baseline Scenario**					
3.4.1. Does the approved methodology that is selected by the proposed project activity prescribe the baseline scenario and hence no further analysis is required? •	EB 101 Report Annex 2 §94 EB 101 Report Annex 1 §59	DR	Yes	OK	OK
3.4.2. Does the PD identify the baseline for the proposed project activity, defined as the scenario that reasonably represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the proposed project activity?	EB 101 Report Annex 2 §75 EB 101 Report Annex 1 §61	DR	Yes	OK	OK
3.4.3. If the methodology requires use of the tools to identify the baseline scenario, have all those been applied?	EB 101 Report Annex 2 §77	DR	Yes	OK	OK
3.4.4. Are there relevant national and/or sectoral policies to identify the baseline scenario?	EB 101 Report	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
	Annex 2 §81 EB 101 Report Annex 1 §64				
3.4.5. If there are relevant national and/or sectoral policies to identify the baseline scenario, have those been considered correctly in the PDD?	EB 101 Report Annex 2 §83d	DR	N/A	OK	OK
3.4.6. Are there relevant circumstances to identify the baseline scenario?	EB 101 Report Annex 2 §81	DR	N/A	OK	OK
3.4.7. Does the methodology require several alternative scenarios to be considered in the identification of the most reasonable baseline scenario?	EB 101 Report Annex 2 §78	DR	Yes	OK	OK
3.4.8. If the methodology requires several alternative scenarios to be considered in the identification of the most reasonable baseline scenario, are all credible scenarios that are in the PD and are supplementary to those required by the methodology reasonable in the context of the proposed project activity?	EB 101 Report Annex 2 §78	DR	Yes	OK	OK
3.4.9. If the proposed project activity includes several different facilities, technologies, outputs or services, do the alternative scenarios for each of them be identified separately?	EB70 Report Annex 8	DR	N/A	OK	OK
3.4.10. If the alternative scenarios for each of them be identified separately, are	EB70	DR	N/A	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
the realistic combinations of these be considered as possible alternative scenarios to the proposed project activity?	Report Annex 8				
3.4.11. Does the list of alternative scenarios given in the PD include the following?	EB 101 Report Annex 2 §93	DR	Yes	OK	OK
3.4.11.1. The project activity is undertaken without being registered as a CDM project activity	EB 101 Report Annex 2 §93a	DR	N/A	OK	OK
3.4.11.2. All plausible alternatives	EB 101 Report Annex 2 §93b	DR	N/A	OK	OK
3.4.11.3. Comply with all applicable and enforced legislation	EB 101 Report Annex 2 §93c	DR	N/A	OK	OK
3.4.12. Has the PP explained how the baseline scenario is established in accordance with the selected methodology(ies)?	CDM-PDD-FORM Version 11.0 EB93 Report Annex 4 §62	DR	Yes	OK	OK
3.4.13. Where the procedure in the selected methodology(ies) involves several steps, has the PPs described	VCS Std. Version 4.0	DR	Yes	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
how each step is applied and transparently documented the outcome of each step?	CDM-PDD-FORM version 11.0 EB 101 Report Annex 1 §59				
3.4.14. Has the PP provided and explained all data used to establish the baseline scenario (variables, parameters, data sources, etc.)?	CDM-PDD-FORM version 11.0	DR	Yes	OK	OK
3.4.15. Is the identified baseline scenario reasonably supported by correct and verifiable references, assumptions, calculations and ratinonales?	VCS Std. Version 4.0 CDM-PDD-FORM version 11.0	DR	Yes	OK	OK
3.4.16. Has the selected methodology been correctly applied with respect to baseline identification?	CDM-PDD-FORM version 11.0 EB 101 Report Annex 2 §80	DR	Yes	OK	OK
ACM 0002					
3.4.17. If the project activity involves the installation of a greenfield power plant, is the baseline scenario identified appropriately in accordance with the ACM 0002?	ACM 0002 Version 20.0	DR	Yes	OK	OK
3.4.18. If the project activity involves capacity addition to existing grid-	ACM 0002	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
connected renewable power plant/unit, is the baseline scenario identified appropriately in accordance with the ACM0002?	Version 20.0				
3.4.19. If the proposed project activity is a capacity addtion, retrofit, rehabilitation or replacement, have the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit or rehabilitation of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity?	ACM 0002 Version 20.0	DR	N/A	OK	OK
3.4.20. If the project activity is the retrofit or replacement of existing grid-connected renewable power plant/unit, is the point of time at which the generation facility would likely be replaced or retrofitted ($DATE_{Baseline\ Retrofit}$) defined?	ACM 0002 Version 20.0	DR	N/A	OK	OK
3.4.21. If the project activity is the retrofit or replacement of existing grid-connected renewable power plant/unit, is the baseline scenario identified following the step-wise procedure in accordance with the ACM0002?	ACM 0002 Version 20.0	DR	N/A	OK	OK
3.4.22. Are the realistic and credible alternative baseline scenarios for power generation appropriately identified following the Step 1 of the	ACM 0002 Version 20.0	DR	Yes	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
"Combined tool to identify the baseline scenario and demonstrate additionality"?					
3.4.23. Is "the proposed project activity undertaken without being registered as a CDM project activity" listed as one of the alternatives?	EB70 Report Annex 8 EB 101 Report Annex 2 §93a ACM 0002 Version 20.0	DR	Yes	OK	OK
3.4.24. Has "other realistic and credible alternative scenario(s) to the proposed CDM project activity scenario that deliver outputs services or services with comparable quality, properties and application areas" been listed as an alternative?	EB70 Report Annex 8 EB 101 Report Annex 2 §93b ACM 0002 Version 20.0	DR	N/A	OK	OK
3.4.25. Has "continuation of the current situation (no project activity or other alternatives undertaken" been listed as an alternative?	EB70 Report Annex 8 ACM 0002 Version 20.0	DR	Yes	OK	OK
3.4.26. If the barrier analysis is used, is the Step 2 of the latest applicable version of "Combined tool to identify the baseline scenario and demonstrate additionality" applied appropriately?	ACM 0002 Version 20.0	DR	Yes	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.4.27. If more than one alternative is remaining after Step 2 and if the remaining alternatives include scenarios P1 and P3, is the Investment Comparison as per step 3 of the "Combined tool to identify the baseline scenario and demonstrate additionality" applied appropriately?	ACM 0002 Version 20.0	DR	Yes	OK	OK
3.4.28. If more than one alternative is remaining after Step 2 and if the remaining alternatives include scenarios P1 and P2, is the Benchmark Analysis as per step 2b of the "Tool for the demonstration and assessment of additionality" applied appropriately?	ACM 0002 Version 20.0	DR	Yes	OK	OK
ACM 0001					
3.4.29. Has the the most plausible baseline scenario been determined according to the simplified procedures or the procedures according to the latest applicable version of the "Combined tool to identify the baseline scenario and demonstrate additionality"? c)	ACM 0001 Version 19.0	DR	N/A	OK	OK
AM0058					
3.4.30. Is the most plausible baseline scenario "no implementation of primary district heating system (continuation of current practice)"?	AM0058 Version 5.0	DR	N/A	OK	OK
AMS I.D.					
3.4.31. If the project activity is greenfield	AMS I.D.	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
power plant, is the baseline scenario identified as "the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid?	Version 18.0 §19				
3.4.32. If the project activity involves retrofits, rehabilitations or replacements of an existing facility, is baseline scenario identified appropriately in accordance with AMS I.D.?	AMS I.D. Version 18.0 §20	DR	N/A	OK	OK
3.4.33. Have the PPs demonstrated the remaining lifetime of the equipment replaced according to the requirements described in the general guidelines to SSC CDM methodologies?	AMS I.D. Version 18.0 §21	DR	N/A	OK	OK
3.4.34. If the project activity involves capacity addition to existing grid-connected renewable energy power plant/unit,, is baseline scenario identified appropriately in accordance with AMS I.D.?	AMS I.D. Version 18.0 §21	DR	N/A	OK	OK
3.4.35. Have the PPs explained and documented the quantities and types of biomass and the biomass to fossil fuel ratio (in case of co-fired system) to be used during the crediting period in the PDD?	AMS I.D. Version 18.0 §44	DR	N/A	OK	OK
AMS I.C.					

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.4.36. If the project activity is a renewable energy technology that displaces technologies using fossil fuels, is the baseline scenario identified appropriately in accordance with AMS I.C.?	AMS I.C. Version 21 §24	DR	N/A	OK	OK
3.4.37. If the project activity is implemented on existing facilities, are the baseline calculations based on operational data on energy use (e.g. electricity, fossil fuel) and plant output (e.g. steam/chilling/electricity thermal and/or electrical energy) using one of the following?	AMS I.C. Version 21 §25 §26	DR	N/A	OK	OK
3.4.37.1. Most recent three years operational data immediately prior to the start date of the project activity in case of existing facilities which has more than three years of operation history;	AMS I.C. Version 21 §26-a	DR	N/A	OK	OK
3.4.37.2. A minimum of most recent one year data in case of existing facilities which has more than three years of operation history but do not have three years operational data; or	AMS I.C. Version 21 §26-b	DR	N/A	OK	OK
3.4.37.3. A performance test/measurement campaign carried out prior to the implementation of the project activity in case of existing facilities which has more than three years of operation history but do not have operational	AMS I.C. Version 21 §26-c	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
data/information such as efficiency, energy consumption and output or the available data is not reliable due to various factors such as the use of imprecise or non-calibrated measuring equipment.					
3.4.38. If the project activity is implemented in existing faclities where the additionality is demonstrated based on a baseline scenario that is not the continuation of the current practice, has the PPs chosen the baseline emission factor as the lower of the following two choices?	AMS I.C. Version 21 §28	DR	N/A	OK	OK
3.4.38.1. The emission factor of the fossil fuel that would have been used in the absence of the project activity;	AMS I.C. Version 21 §28-a	DR	N/A	OK	OK
3.4.38.2. The emission factor of the fossil fuel that was used prior to the implementation of the project activity.	AMS I.C. Version 21 §28-b	DR	N/A	OK	OK
3.4.39. If the proposed project activity is producing both heat and thermal energy, is the baseline scenario determined as one of the following?	AMS I.C. Version 21 §29	DR	N/A	OK	OK
3.4.39.1. Electricity is imported from a grid and thermal energy (steam/heat) is produced using fossil fuel	AMS I.C. Version 21 §29-a	DR	N/A	OK	OK
3.4.39.2. Electricity is produced in an on-site captive power plant using	AMS I.C.	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
fossil fuel (with a possibility of export to the grid) and thermal energy is produced using fossil fuel	Version 21 §29-b				
3.4.39.3. A combination of 3.4.39.1 and 3.4.39.2	AMS I.C. Version 21 §29-c	DR	N/A	OK	OK
3.4.39.4. Electricity and thermal energy) are produced in a cogeneration or trigeneration unit using fossil fuel (with a possibility of export of electricity to a grid/other facilities and/or thermal energy to other facilities);	AMS I.C. Version 21 §29-d	DR	N/A	OK	OK
3.4.39.5. Electricity is imported from a grid and/or produced in an on-site captive power plant using fossil fuels (with a possibility of export to the grid); steam/heat is produced using biomass	AMS I.C. Version 21 §29-e	DR	N/A	OK	OK
3.4.39.6. Electricity is produced in an on-site captive power plant using biomass (with a possibility of export to a grid) and/or imported from a grid; thermal energy is produced using fossil fuel	AMS I.C. Version 21 §29-f	DR	N/A	OK	OK
3.4.39.7. Electricity and thermal energy are produced in a biomass fired cogeneration or trigeneration unit (without a possibility of export of electricity either to a grid or to other facilities and without a possibility of export of thermal energy to other facilities)	AMS I.C. Version 21 §29-g §30	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
3.4.39.8. Electricity and/or thermal energy produced in a co-fired system	AMS I.C. Version 21 §29-h	DR	N/A	OK	OK
3.4.39.9. Electricity is imported from a grid and/or produced in a biomass fired cogeneration or trigeneration unit (without a possibility of export of electricity either to the grid or to other facilities); thermal energy is produced in a biomass fired cogeneration or trigeneration unit and/or a biomass fired boiler (without a possibility of export of thermal energy to other facilities)	AMS I.C. Version 21 §29-i §31	DR	N/A	OK	OK
3.4.39.10. Electricity is imported from a grid and/or produced in an on-site captive power plant using fossil fuel and thermal energy is produced using electricity.	AMS I.C. Version 21 §29-j	DR	N/A	OK	OK
3.4.40. If the project activity seeks to retrofit or modify an existing facility for renewable energy generation, is the baseline scenario determined according to the methodology?	AMS I.C. Version 21 §58 §59	DR	N/A	OK	OK
3.5. **Additionality**	**This section of the PD is not reviewed as the project is under validation for renewal of crediting period but please check the regulatory surplus as in below.**				
3.5.1. Has the regulatory surplus been demonstrated in accordance with the	VCS Std.	DR	Yes	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
latest applicable requirements set out in the VCS Program available at the time of crediing period renewal process?	Version 4.0 Validation and Verification Manual Version 3.2				
3.6. **Methodology Deviations**					
3.6.1. If there are deviations from the methodology, has the PPs provided and justified the methodology deviations?	VCS Std. Version 4.0	DR	Please state exactly from which documentation the generation data will be verified and also cross checked and if this is a deviation from first PDD, please state in Current PDD.	CAR-10	OK
3.6.2. If there are deviations from the methodology, has the evidence been provided on the following?	VCS Std. Version 4.0	DR	N/A	OK	OK
3.6.2.1. The deviation will not negatively impact the conservativeness of the quantification of GHG emission reductions or removals.	VCS Std. Version 4.0	DR	N/A	OK	OK
3.6.2.2. The deviation relates only to the criteria and procedures for monitoring or measurement, and does not relate to any other part of the methodology	VCS Std. Version 4.0	DR	N/A	OK	OK
4. QUANTIFICATION of GHG EMISSION REDUCTIONS and REMOVALS					
4.1. **Baseline Emissions**					
4.1.1. Do the steps taken and equations applied to calculate baseline	VCS Std.	DR	The calculation of baseline emissions is correct based on the applied methodology and related tools.	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
emissions comply with the requirements of the selected baseline and monitoring methodology including applicable tool(s)?	Version 4.0 CDM-PDD-FORM Version 11.0				
4.1.2. Is it explained and clearly stated how the procedures in the approved methodology to calculate baseline emissions are applied by the PPs?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
4.2. **Project Emissions**					
4.2.1. Do the steps taken and equations applied to calculate project emissions comply with the requirements of the selected baseline and monitoring methodology including applicable tool(s)?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Project emission is taken as zero which is suitable based on the applied methodology, ACM0002.	OK	OK
4.2.2. Is it explained and clearly stated how the procedures in the approved methodology to calculate project emissions are applied by the PPs?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
4.2.3. Has the PPs explained and justified all relevant methodological choices including the following?	CDM-PDD-FORM Version 11.0 EB101	DR	Please see below.		OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
	Report Annex 1 §72				
4.2.3.1. Where the methodology(ies) or standardized baseline(s) include different scenarios or cases, indicate and justify which scenario or case applies to the project activity	CDM-PDD-FORM version 11.0 EB101 Report Annex 1 §72	DR	N/A	OK	OK
4.2.3.2. Where the methodology(ies) or standardized baseline(s) provide different options to choose from , indicate and justify which option is chosen for the project activity	CDM-PDD-FORM version 11.0 EB101 Report Annex 1 §72	DR	N/A	OK	OK
4.2.3.3. Where the methodology(ies) or standardized baseline(s) allow different default values, indicate and justify which of the default values have been chosen for the project activity.	CDM-PDD-FORM Version 11.0	DR	N/A	OK	OK
4.3. **Leakage**					
4.3.1. Do the steps taken and equations applied to calculate leakage comply with the requirements of the selected	VCS Std. Version 4.0 CDM-PDD-	DR	Leakage emission is taken as zero which is suitable based on the applied methodology, ACM0002.	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
baseline and monitoring methodology including applicable tool(s)?	FORM Version 11.0				
4.3.2. Is it explained and clearly stated how the procedures in the approved methodology to calculate leakages are applied by the PPs?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
4.4. **Summary of GHG Emission Reductions and Removals**					
4.4.1. Have the project proponents included the description of the procedure for quantification of the net GHG emission reductions and removals including all relevant equations?	VCS Std. Version 4.0	DR	Yes	OK	OK
4.4.2. Are the ex-ante calculation (estimate) of baseline emissions/removals, project emissions/removals, leakage emissions and net emission reductions and removals provided in a tabular format?	VCS Std. Version 4.0	DR	They are all provided in a tabular format.	OK	OK
4.4.3. Has it been documented how each equation is applied in a manner that enables the reader to reproduce the calculation?	VCS Std. Version 4.0	DR	Yes	OK	OK
4.4.4. Are the example calculations for all key equations provided to allow the reader to reproduce the calculation of	VCS Std. Version 4.0	DR	Yes	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
estimated net GHG emission reductions or removals?					
ACM 0002					
4.4.5. Are baseline emissions calculated using equation (11) given in the methodology?	ACM 0002 Version 20.0	DR	Yes, it is calculated using the proper equation.	OK	OK
4.4.6. Is the quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y ($EG_{PJ,y}$) calculated using equations (12), (13), (14), (15) or (16) given in the methodology depending on the project type and relevant requirements? ➢	ACM 0002 Version 20.0	DR	Yes, it is calculated using the proper equation.	OK	OK
4.4.7. When the methodology offers options for approaches in calculations, is it documented in the PD which option is applied?	ACM 0002 Version 17.0	DR	Yes, it is documented.	OK	OK
4.4.8. In the case of retrofits or replacements, has the point in time when the existing equipment would need to be replaced/retrofitted in the absence of the project chosen in a conservative manner?	ACM 0002 Version 20.0	DR	N/A	OK	OK
4.4.9. In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects)	ACM 0002 Version 20.0	DR	N/A	OK	OK
4.4.9.1. Is it ensured that the	ACM 0002	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
existing plant started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions?	Version 20.0				
4.4.9.2. Is it defined in the baseline emission section that no capacity addition, retrofit or rehabilitation of the plant has been undertaken between the start of this minimum historical reference period and the implementation of the project activity?	ACM 0002 Version 20.0	DR	N/A	OK	OK
4.4.10. Are the project emissions calculated properly using equations (1), (2), (3), (4), (5), (6), (7), (8), (9) or (10) given in the methodology depending on the project type and the power density value?	ACM 0002 Version 20.0	DR	Project emission is taken zero which is suitable based on the applied methodology, ACM0002.	OK	OK
4.4.11. Where project emissions are taken as “0”, has the PP made proper justification?	ACM 0002 Version 20.0	DR	As the proposed project activity is a new grid-connected hydro power plant and there is no reservoir in the project, for this reason, PEy is considered as “0” in line with ACM0002, Version 20.	OK	OK
4.4.12. Are the emission reductions calculated using equation (17) given in the methodology?	ACM 0002 Version 20.0	DR	Yes	OK	OK
ACM 0001					
4.4.13. Are the baseline emissions calculated using relevant equations from equation (1) to equation (21) in the methodology?	ACM 0001 Version 19.0	DR	N/A	OK	OK
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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.4.14. Are the project emissions calculated using relevant equations from equation (22) to equation (25) in the methodology?	ACM 0001 Version 19.0	DR	N/A	OK	OK
4.4.15. Are the emission reductions calculated using equation (26) in the methodology?	ACM 0001 Version 19.0	DR	N/A	OK	OK
AM0058					
4.4.16. Are the baseline emissions calculated using equation (1) in the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
4.4.17. Are the baseline emissions from heat generation calculated using equation (2) in the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
4.4.18. Is the CO2 emission factor for heat supply in the baseline calculated using equation (3) in the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
4.4.19. Is the emission factor for new users calculated using equation (4) in the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
4.4.20. Are the baseline emissions from the power generation calculated using equation (5) and equation (6) in the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
4.4.21. Are the project emissions calculated using latest applicable version of “Tool To Calculate Project or Leakage CO2 Emissions From Fossil Fuel Combustion” and the relevant principles defined in the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.4.22. Are the leakage emissions calculated using equation (7) and equation (8) in the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
4.4.23. Are the emission reductions calculated using equation (9) in the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
AMS I.C.					
4.4.24. Are the baseline emissions for electricity produced in captive plants calculated using equation (1) given in the methodology?	AMS I.C. Version 21 §32	DR	N/A	OK	OK
4.4.25. Are the baseline emissions for supply of electricity to and/or displacement of electricity from a grid calculated using equation (2) given in the methodology?	AMS I.C. Version 21 §33	DR	N/A	OK	OK
4.4.26. Are the baseline emissions for thermal energy produced using fossil fuels and/or grid electricity calculated using equation (3) given in the methodology?	AMS I.C. Version 21 §34 §35	DR	N/A	OK	OK
4.4.27. Is the emission factor of electricity determined according to the following?	AMS I.C. Version 21 §36	DR	N/A	OK	OK
4.4.27.1. For project activities that displace on-site captive	AMS I.C.	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
electricity and/or displace grid electricity import and/or supply electricity to a grid, does the electricity emission factor reflect the emissions intensity of the captive power plant and the grid of the baseline scenario?	Version 21 §36				
4.4.27.2. For project activities that do not displace captive electricity generated by an existing plant but displace grid electricity import and/or supply electricity to a grid, does the emission factor of the grid calculated as per the procedures detailed in AMS-I.D or AMS-I.F?	AMS I.C. Version 21 §37	DR	N/A	OK	OK
4.4.27.3. For new facilities, has the emission factor of electricity taken as the most conservative (lowest) emission factor of the two power sources (captive power plant and grid)?	AMS I.C. Version 21 §38	DR	N/A	OK	OK
4.4.28. Are the baseline emissions for electricity and thermal energy produced in a baseline cogeneration or trigeneration unit using fossil fuel calculated using equation (4) given in the methodology?	AMS I.C. Version 21 §39	DR	N/A	OK	OK
4.4.29. In the case of an existing baseline cogeneration or trigeneration plant, is the efficiency of the baseline units determined by adopting one of the following criteria with the exclusion of	AMS I.C. Version 21 §40	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
cogeneration plants?					
4.4.29.1. Most recent three years operational data immediately prior to the start date of the project activity in case of existing facilities which has more than three years of operation history;	AMS I.C. Version 21 §26	DR	N/A	OK	OK
4.4.29.2. A minimum of most recent one year data in case of existing facilities which has more than three years of operation history but do not have three years operational data; or	AMS I.C. Version 21 §26	DR	N/A	OK	OK
4.4.29.3. A performance test/measurement campaign carried out prior to the implementation of the project activity in case of existing facilities which has more than three years of operation history but do not have operational data/information such as efficiency, energy consumption and output or the available data is not reliable due to various factors such as the use of imprecise or non-calibrated measuring equipment. The project proponent may follow the relevant provisions from the "Tool to determine baseline efficiency of thermal and electricity systems".	AMS I.C. Version 21 §26 §32	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.4.29.4. For household or commercial applications/systems, whose maximum output capacity is less than 45 kW thermal and where it can be demonstrated that the metering of thermal energy output is not plausible, as in the case of cooking stoves, gasifiers, driers, water heaters etc., is the efficiency of the baseline units determined by adopting one of the following criteria?	AMS I.C. Version 21 §43	DR	N/A	OK	OK
4.4.29.5. Highest measured operational efficiency over the full range of operating conditions of a representative sample of units with similar specifications, using baseline fuel	AMS I.C. Version 21 §43-a	DR	N/A	OK	OK
4.4.29.6. Highest of the efficiency values provided by two or more manufacturers for units with similar specifications using the baseline fuel	AMS I.C. Version 21 §43-b	DR	N/A	OK	OK
4.4.29.7. Highest efficiency from referenced literature values or default efficiency of 100%.	AMS I.C. Version 21 §43-c	DR	N/A	OK	OK
4.4.30. For the cases where electricity is imported from a grid and/or produced in an on-site captive power plant using fossil fuel thermal energy is	AMS I.C. Version 21	DR	N/A	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
produced using biomass, are the baseline emissions from production of electricity calculated in line with the paragraphs 29 and 30 of the methodology?	§44				
4.4.31. For the cases where the electricity is produced in an on-site captive power plant using biomass (with a possibility of export to a grid) and/or imported from a grid; thermal energy is produced using fossil fuel, are the baseline emissions from the production of thermal energy using fossil fuel calculated using equation (1) given in the methodology?	AMS I.C. Version 21 §32 §45	DR	N/A	OK	OK
4.4.32. For the cases where electricity and thermal energy are produced in a biomass fired cogeneration unit and for the cases where electricity is imported from a grid and/or produced in a biomass fired cogeneration unit; steam/heat is produced in a biomass fired cogeneration unit and/or a biomass fired boiler, are the baseline emissions from the additional production of electricity that displaces grid electricity import and/or supply electricity to the grid, calculated using as per the procedures detailed in AMS-I.D or AMS-I.F as applicable?	AMS I.C. Version 21 §30 §46	DR	N/A	OK	OK
4.4.33. For the cases where the electricity and/or thermal energy produced in a co-fired system and other project	AMS I.C. Version 21	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
activities where the baseline is a co-fired system, are the baseline emissions determined based on three years average historical data on the relative share of fossil fuel and biomass in the baseline fuel mix using equation (5) given in the methodology?	§47				
4.4.34. For the cases where the electricity is imported from a grid and/or produced in an on-site captive power plant using fossil fuel and thermal energy is produced using electricity, are the baseline emissions calculated using equation (6) given in the methodology?	AMS I.C. Version 21 §48	DR	N/A	OK	OK
4.4.35. For the cases where the electricity is imported from a grid and/or produced in an on-site captive power plant using fossil fuel and thermal energy is produced using electricity, are the baseline electricity related emissions (BEgrid,y) calculated using equation (2) given in the methodology?	AMS I.C. Version 21 §49	DR	N/A	OK	OK
4.4.36. For the cases where the electricity is imported from a grid and/or produced in an on-site captive power plant using fossil fuel and thermal energy is produced using electricity, are the baseline emissions (BEcaptelec,y) from electricity obtained from captive power plant(s), calculated using equation (1) given in the methodology?	AMS I.C. Version 21 §50	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.4.37. For the cases where the electricity is imported from a grid and/or produced in an on-site captive power plant using fossil fuel and thermal energy is produced using electricity, are the baseline emissions associated with the electricity consumed, whether it is from captive power plants and/or power from the grid, to produce chilled water within the project boundary are determined using equation (7) given in the methodology?	AMS I.C. Version 21 §51	DR	N/A	OK	OK
4.4.38. For the cases where the electricity is imported from a grid and/or produced in an on-site captive power plant using fossil fuel and thermal energy is produced using electricity, is the baseline scenario chiller COP (COPc,i) determined in the following manner?	AMS I.C. Version 21 §51-a	DR	N/A	OK	OK
4.4.38.1. If the baseline scenario is an existing chiller or chillers, then the COP shall be based on existing chiller performance data as specified in paragraph 25 of the methodology	AMS I.C. Version 20 §51-a-i	DR	N/A	OK	OK
4.4.38.2. If the baseline scenario is a chiller or chillers that would have been built (i.e. not existing chillers), the COP shall be determined as the highest COP full load performance value provided by two or more manufacturers for chillers	AMS I.C. Version 21 §51-a-ii	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
commonly sold in the project country for the indicated commercial application;					
4.4.38.3. For the cases where the electricity is imported from a grid and/or produced in an on-site captive power plant using fossil fuel and thermal energy is produced using electricity, is the cooling output of each baseline scenario chiller calculated using equation (8) given in the methodology?	AMS I.C. Version 21 §51-b	DR	N/A	OK	OK
4.4.39. For project activities with water heating systems, that use electricity, are the baseline emissions determined using equation (9) given in the methodology?	AMS I.C. Version 21 §52	DR	N/A	OK	OK
4.4.40. For the cases where project activities involve the addition of renewable energy units at an existing renewable energy production facility, are the existing units considered in the determination of baseline emissions, project emissions, and/or leakage, as relevant?	AMS I.C. Version 21 §53	DR	N/A	OK	OK
4.4.41. In the cases where project activities involve the addition of new energy production units at an existing facility has the net increase in thermal energy been calculated using equations (10) and (11) given in the methodology?	AMS I.C. Version 21 §54 §55 §56 §57	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.4.42. If the project activity seeks to retrofit or modify an existing facility to enhance the energy conversion efficiency, is the thermal energy production by an existing facility calculated using equation (12) given in the methodology?	AMS I.C. Version 21 §59	DR	N/A	OK	OK
4.4.43. If the project activity seeks to retrofit or modify an existing facility to enhance the energy conversion efficiency, are the baseline emissions from the incremental thermal energy supplied due to retrofit calculated using equation (13) given in the methodology?	AMS I.C. Version 21 §60	DR	N/A	OK	OK
4.4.44. If the project activity seeks to retrofit or modify an existing facility to enhance the energy conversion efficiency, are the requirements concerning the demonstration of the remaining lifetime of the replaced equipment met as described in the "General Guidelines for SSC CDM methodologies"?	AMS I.C. Version 21 §61 §62	DR	N/A	OK	OK
4.4.45. In case of the project activities that seek to retrofit or modify an existing facility for the purpose of fuel switch from fossil fuels to biomass in heat generation equipment, are the baseline emissions calculated using equation (2) given in the methodology?	AMS I.C. Version 21 §63	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
4.4.46. In case of household or commercial applications/systems, whose maximum output capacity is less than 45 kW thermal and where it can be demonstrated that the metering of thermal energy output is not plausible, as in the case of biomass stoves, gasifiers, driers, water heaters etc., are the baseline emissions calculated as per equation (14) given in the methodology?	AMS I.C. Version 21 §64	DR	N/A	OK	OK
4.4.47. If applicable, are the quantities and types of biomass and the biomass to fossil fuel ratio (in the case of co-fired systems) to be used during the crediting period explained and documented transparently in the CDM-PDD?	AMS I.C. Version 21 §65	DR	N/A	OK	OK
4.4.48. If applicable, have the ex-ante estimation of biomass and the biomass to fossil fuel ratio quantities been provided for the selection of the baseline scenario?	AMS I.C. Version 21 §65	DR	N/A	OK	OK
4.4.49. If applicable, is the project emissions calculated using equation (15) in the methodology?	AMS I.C. Version 21 §66	DR	N/A	OK	OK
4.4.50. If applicable, are the project emissions from on-site consumption of fossil fuels calculated using the latest version of the *"Tool to calculate project or leakage CO2 emissions from fossil fuel combustion"*?	AMS I.C. Version 21 §67	DR	N/A	OK	OK
4.4.51. If applicable, are the project emissions resulting from the	AMS I.C.	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
electricity consumption by the project activity calculated using the latest version of the "*Tool to calculate baseline, project and/or leakage emissions from electricity consumption*"?	Version 21 §68				
4.4.52. In case of geothermal project activities, have the PPs accounted for the following emission sources, where applicable?	AMS I.C. Version 21 §69	DR	N/A	OK	OK
4.4.52.1. Fugitive emissions of carbon dioxide and methane due to release of non-condensable gases from produced steam	AMS I.C. Version 21 §69	DR	N/A	OK	OK
4.4.52.2. Carbon dioxide emissions resulting from combustion of fossil fuels related to the operation of the geothermal power plant	AMS I.C. Version 21 §69	DR	N/A	OK	OK
4.4.53. In case of geothermal project activities, are the project emissions calculated using equations (16), (17) and (18) given in the methodology?	AMS I.C. Version 21 §70 §71 §72	DR	N/A	OK	OK
4.4.54. In case of trigeneration project activities, are the project emissions calculated using equations (19) and (20) and the options given in the methodology?	AMS I.C. Version 21 §73 §74 §75	DR	N/A	OK	OK
4.4.55. In cases where the project activity utilizes biomass sourced from	AMS I.C.	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
dedicated plantations, are the project emissions from biomass cultivation calculated according to the latest version of "Project emissions from cultivation of biomass" tool?	Version 21 §76				
4.4.56. In cases where the energy generating equipment currently being utilised is transferred from outside the boundary to the project activity, is the leakage considered?	AMS I.C. Version 21 §77 §80	DR	N/A	OK	OK
4.4.57. In cases where the collection /processing /transportation of biomass residues is outside the project boundary and due to the implementation of the project activity biomass residues are transported over a distance of 200 kilometres, are the CO2 emissions from the collection, processing and transportation of biomass residues to the project site calculated using the latest version of tool "Project and leakage emissions from transportation of freight"?	AMS I.C. Version 21 §78	DR	N/A	OK	OK
4.4.58. In case of biomass project activities, are the leakage emissions on account of the diversion of biomass residues from other uses calculated in line with the latest version of "General guidance on leakage in biomass project activities"?	AMS I.C. Version 21 §80	DR	N/A	OK	OK
4.4.59. Have the PPs calculated the emission reductions using equation	AMS I.C.	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
(21) given in the methodology?	Version 21 §81				
AMS I.D.					
4.4.60. Are baseline emissions calculated using equation (1) given in the methodology?	AMS I.D. Version 18.0 §22	DR	N/A	OK	OK
4.4.61. Is the emission factor calculated using one of the following options:	AMS I.D. Version 18.0 §23	DR	N/A	OK	OK
4.4.61.1. A combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) according to the procedures prescribed in the "Tool to calculate the Emission Factor for an electricity system	AMS I.D. Version 18.0 §23	DR	N/A	OK	OK
4.4.61.2. The weighted average emissions (in t CO2/MWh) of the current generation mix.	AMS I.D. Version 18.0 §23	DR	N/A	OK	OK
4.4.62. Have the calculations been based on data from an official source (where available) and made publicly available?	AMS I.D. Version 18.0 §24	DR	N/A	OK	OK
4.4.63. In case of green field power plant, is the generated electricity as a result of project activity calculated using equation (2) given in the methodology?	AMS I.D. Version 18.0 §26	DR	N/A	OK	OK
4.4.64. In case of capacity addition in wind, solar, wave or tidal power plants, are the baseline emissions	AMS I.D. Version 18.0	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
calculated using equation (3) given in the methodology?	§27				
4.4.65. In case of capacity addition in hydro or geothermal power plants, have the requirements defined in Section 5.5.1.3 of the methodology been followed?	AMS I.D. Version 18.0 §28	DR	N/A	OK	OK
4.4.66. In case of capacity addition to biomass power plants, are the baseline emissions calculated using equations (4) and (5) given in the methodology?	AMS I.D. Version 18.0 §29 §30	DR	N/A	OK	OK
4.4.67. In case of retrofit, rehabilitation or replacement in hydro, solar, wind, geothermal, wave and tidal plants, are the baseline emissions calculated using equation (6) given in the methodology?	AMS I.D. Version 18.0 §31	DR	N/A	OK	OK
4.4.68. In case of retrofit, rehabilitation or replacement in biomass plants, are the baseline emissions calculated using equations (7) and (8) given in the methodology?	AMS I.D. Version 18.0 §32	DR	N/A	OK	OK
4.4.69. In case of retrofit, rehabilitation or replacement, have the PPs used among the following two time spans of historical data to determine EGhistorical?	AMS I.D. Version 18.0 §33 §35 §36	DR	N/A	OK	OK
4.4.69.1. The three last calendar years (five calendar years for hydro project) prior to the implementation of the project	AMS I.D. Version 18.0 §35	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
activity					
4.4.69.2. The time period from the calendar year following *DATEhist*, up to the last calendar year prior to the implementation of the project, as long as this time span includes at least three calendar years (five calendar years for hydro project), where *DATEhist* is latest point in time between:	AMS I.D. Version 18.0 §35	DR	N/A	OK	OK
4.4.69.2.1. The commercial commissioning of the plant/unit;	AMS I.D. Version 18.0 §35	DR	N/A	OK	OK
4.4.69.2.2. If applicable: the last capacity addition to the plant/unit; or	AMS I.D. Version 18.0 §35	DR	N/A	OK	OK
4.4.69.2.3. If applicable: the last retrofit of the plant/unit	AMS I.D. Version 18.0 §35	DR	N/A	OK	OK
4.4.70. In case of retrofit, rehabilitation or replacement, have PPs followed the latest applicable version of "Tool to determine the remaining lifetime of equipment" to estimate DATEBaselineRetrofit? DATEBaselineRetrofit is the point in time when the existing equipment would need to be replaced/retrofitted in the absence of the project activity. The point in time when the existing equipment would need to be replaced/retrofitted in the	AMS I.D. Version 18.0 §37 §38	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
absence of the project activity should be chosen in a conservative manner that is, if a range is identified, the earliest date should be chosen.					
4.4.71. Where the project emissions are taken as "0" have the PPs made proper justification?	AMS I.D. Version 18.0 §39	DR	N/A	OK	OK
4.4.72. If the proposed project activity is a geothermal power plant or a hydropower plant, have the project emissions been considered following the procedure described in most recent version of ACM0002?	AMS I.D. Version 18.0 §39	DR	N/A	OK	OK
4.4.73. If necessary, have the PPs calculated the CO2 emissions from on-site consumption of fossil fuels due to the project activity using the latest applicable version of the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion?	AMS I.D. Version 18.0 §40	DR	N/A	OK	OK
4.4.74. In case biomass is sourced from dedicated plantations, have the procedures in the tool "Project emissions from cultivation of biomass" been followed to calculate project emissions?	AMS I.D. Version 18.0 §41	DR	N/A	OK	OK
4.4.75. Has the general guidance on leakage in biomass project activities been followed to quantify leakages pertaining to the use of biomass residues?	AMS I.D. Version 18.0 §42	DR	N/A	OK	OK
4.4.76. Are the emission reductions calculated using equation (9) given in the methodology?	AMS I.D. Version 18.0	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
	§43				
5. MONITORING					
5.1. **Data and Parameters That Are Available At Validation**					
5.1.1. Are all data sources and assumptions for the ex-ante values, appropriate and correct?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.1.2. Are all ex-ante values applicable to the proposed VCS project activity?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.1.3. Are all ex-ante values resulting in an accurate or otherwise conservative estimate of the emission reductions?	CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.1.4. Are the ex-ante data and parameters correct?	CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.1.5. Are the units of the data and parameters specified correctly?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.1.6. Are the description of data and	VCS Std.	DR	Yes	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
parameters given correctly?	Version 4.0 CDM-PDD-FORM Version 11.0				
5.1.7. Is the choice of the source of data explained and justified?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.1.8. Are the applied actual values provided correctly?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.1.9. Is the choice of data explained and justified?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.1.10. Where values have been measured, has a description of the measurement methods and procedures (e.g. which standards have been used) been included?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.1.11. Where values have been measured, are the following included in the VCS PD?	VCS Std. Version 4.0 CDM-PDD-FORM Version	DR	Please see below.	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
	11.0				
5.1.11.1. The equipment used	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	N/A	OK	OK
5.1.11.2. responsible person/entity having undertaken the measurement	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	N/A	OK	OK
5.1.11.3. the date of measurement(s)	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	N/A	OK	OK
5.1.11.4. the frequency of measurement(s)	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	N/A	OK	OK
5.1.11.5. the measurement results?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	N/A	OK	OK
					OK
5.2. **Data and Parameters Monitored**					

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
5.2.1. In the data/parameter tabular formats for monitoring, has the name of the each data/parameter been included?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0 AM0058 Version 5.0	DR	a) Please explain how many employees does the PP employ and how many are locals, Please provide evidence and correct this sentence “there are five accounting personnel, five maintenance personnel, two service personnel and fifteen security guards. In total, forty-seven employees are working for the Project Activity” b)In previous PDD surface area, number of employment, Livelihood of the poor, Environmental Indicators (during operation) are also monitored, please explain them in MR and provide evidences.	CAR-11	OK
5.2.2. Has the unit of the each data/parameter been included?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.2.3. Has the description of the each data/parameter been included?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.2.4. Has the source of the each data/parameter been included?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.2.5. Where several sources of	VCS Std.	DR	Yes	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
data/parameters are used, is the choice of data sources explained and justified?	Version 4.0 CDM-PDD-FORM Version 11.0				
5.2.6. Has the frequency of monitoring/recording been included?	VCS Std. Version 4.0	DR	Yes	OK	OK
5.2.7. Are the applied actual values provided correctly?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.2.8. Has the measurement methods and procedures been included?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.2.9. Has the PPs included which measurement equipment is used for monitoring?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	a)Please provide photos of all meters b) Please revise “since they are sealed95 no one”	CL-5	OK
5.2.10. Has the PPs included how the measurement is undertaken?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.2.11. Have the PPs included description of calibration procedures for the	VCS Std. Version 4.0	DR	Yes, but latest test dates should be changed to 14/10/2019 on meters which their serial numbers are	CAR-12	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
monitoring equipment?	CDM-PDD-FORM Version 11.0		8923874, 8923875, 8923876 and 84260477. Also, “Latest two meters test dates are 30/10/2018 and 11/10/2019” sentence should be changed to 14.10.2019.		
5.2.12. Has the accuracy level of the measurement method included?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	0.5 S	OK	OK
5.2.13. Has the responsible person/entity and the interval for the measurements included?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.2.14. If applicable, has the calculation method been included?	VCS Std. Version 4.0	DR	N/A	OK	OK
5.2.15. If the data and parameters monitored in Section 5.2 of the PD are to be determined by a sampling approach, has the PP provided a description of the sampling plan in accordance with the recommended outline for a sampling plan in the latest applicable version of “Standard for Sampling and Surveys for CDM Project Activities and Programme of Activities”? (• •	CDM-PDD-FORM version 11.0 EB105 Report Annex 1 §29 §30 §31 §32 §33	DR	N/A	OK	OK
5.2.16. If the sampling approach is used by the PPs, does the sampling plan present a reasonable approach for	EB86 Report Annex 4	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
obtaining unbiased, reliable estimates of the variables?	§40a				
5.2.17. If the sampling approach is used by the PPs, are the elements of objectives and reliability requirements complete?	EB86 Report Annex 4 §40a-i	DR	N/A	OK	OK
5.2.18. If the sampling approach is used by the PPs, do the requirements specified agree with those stated in the appropriate standards?	EB86 Report Annex 4 §40a-i	DR	N/A	OK	OK
5.2.19. If the sampling approach is used by the PPs, is the population in the sampling plan clearly defined?	EB86 Report Annex 4 §40b	DR	N/A	OK	OK
5.2.20. If the sampling approach is used by the PPs, is the proposed sampling approach clear?	EB86 Report Annex 4 §40c	DR	N/A	OK	OK
5.2.21. If the sampling approach is used by the PPs, does the sampling approach comply with the description of the population?	EB86 Report Annex 4 §40c-ii	DR	N/A	OK	OK
5.2.22. If the sampling approach is used by the PPs, is the proposed sample size adequate to achieve the minimum confidence/precision requirements?	EB86 Report Annex 4 §40d	DR	N/A	OK	OK
5.2.23. If the sampling approach is used by the PPs, is the ex-ante estimate of	EB86 Report	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
the population variance needed for the calculation of the sample size adequately justified?	Annex 4 §40d				
5.2.24. If the sampling approach is used by the PPs, is the sample representative of the population?	EB86 Report Annex 4 §40e	DR	N/A	OK	OK
5.2.25. If the sampling approach is used by the PPs, is it identified how the sampling frame would be kept?	EB86 Report Annex 4 §40e-ii	DR	N/A	OK	OK
5.2.26. If the sampling approach is used by the PPs, are the methods of data collection clear and unambiguous?	EB86 Report Annex 4 §40f-i	DR	N/A	OK	OK
5.2.27. If the sampling approach is used by the PPs, are the procedures for the data measurements defined appropriately and clearly?	EB86 Report Annex 4 §40g	DR	N/A	OK	OK
5.2.28. If the sampling approach is used by the PPs, do the procedures for measurements adequately provide for minimizing non-sampling errors?	EB86 Report Annex 4 §40g	DR	N/A	OK	OK
5.2.29. If the sampling approach is used by the PPs, is the quality control and assurance strategy adequate?	EB86 Report Annex 4 §40g-i	DR	N/A	OK	OK
5.2.30. If the sampling approach is used by the PPs, are the proposed skill sets, qualifications and experience of	EB86 Report Annex 4	DR	N/A	OK	OK

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
the personnel to be engaged to conduct sampling adequate?	§40h-i				
5.3. **Monitoring Plan**					
5.3.1. Are the organizational structure, responsibilities and competencies of the personnel that will be carrying out monitoring activities identified?	VCS Std. Version 4.0	DR	Yes	OK	OK
5.3.2. Are the methods for generating, recording, storing, aggregating, collating and reporting data on monitored parameters described?	VCS Std. Version 4.0	DR	Yes	OK	OK
5.3.3. Are the policies for oversight and accountability of monitoring activities described?	VCS Std. Version 4.0	DR	Yes	OK	OK
5.3.4. Are the procedures for handling internal auditing and non-conformities described?	VCS Std. Version 4.0	DR	Yes	OK	OK
5.3.5. If the sampling approaches used in the monitoring plan, has the following been included?	VCS Std. Version 4.0	DR	N/A	OK	OK
5.3.5.1. target precision levels	VCS Std. Version 4.0	DR	N/A	OK	OK
5.3.5.2. sample sizes	VCS Std. Version 4.0	DR	N/A	OK	OK
5.3.5.3. sample site locations	VCS Std. Version 4.0	DR	N/A	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
5.3.5.4. stratification	VCS Std. Version 4.0	DR	N/A	OK	OK
5.3.5.5. frequency of measurement and	VCS Std. Version 4.0	DR	N/A	OK	OK
5.3.5.6. QA/QC procedures.	VCS Std. Version 4.0	DR	N/A	OK	OK
5.3.6. Have the PPs developed and described the monitoring plan for the proposed project activity in accordance with the selected methodology(ies) and all other applicable rules and requirements?	EB93 Report Annex 4 §75 EB93 Report Annex 5 §117	DR	Yes	OK	OK
5.3.7. Does the monitoring plan include all data, parameters and related information required by the selected methodology(ies)?	EB93 Report Annex 4 §76 EB93 Report Annex 5 §118a-ii ACM 0002 Version 17.0	DR	Yes	OK	OK
5.3.8. Are the monitoring arrangements described in the monitoring plan feasible within the project design?	EB93 Report Annex 5 §118b	DR	Yes	OK	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
5.3.9. Is the operational and management structure for the monitoring of emission reductions or any leakage emissions described in the monitoring plan?	CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.3.10. Does the monitoring plan clearly indicate the responsibilities and internal arrangements for data collection and archiving?	CDM-PDD-FORM Version 11.0 EB101 Report Annex 1 §82c	DR	Yes	OK	OK
5.3.11. Does the monitoring plan reflect good monitoring practices appropriate to the type of project activity?	CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.3.12. Are measurements conducted with according to relevant industry or national/international standards?	CDM-PDD-FORM Version 11.0	DR	Yes	OK	OK
5.3.13. Where appropriate, are the line diagrams to display the GHG data collection and management system been included?	VCS Std. Version 4.0	DR	The single line diagram is in PD.	OK	OK
		DR	Any review document from VCS for last verification?	CL-6	OK

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
Annex-1 Baseline information					
1. If any further background information regarding the application of the baseline methodology is provided, is this information correct and supported by the appropriate evidence?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	N/A	OK	OK
Annex-2 Monitoring information					
1. If any further background information regarding the application of the monitoring methodology is provided, is this information correct and supported by the appropriate evidence?	VCS Std. Version 4.0 CDM-PDD-FORM Version 11.0	DR	N/A	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 Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
CAR-1 Please revise project name not as "Ceyhan HEPP project" but like in the registry.	2.1	Names have been revised.	Review 1: Ok Closed (Revised)
CAR-2 a)Berkman HPP commissioning acceptance dates (for each units) are stated as 20/08/2010, 15/02/2012, 28/08/2010, respectively, in the commissioning documents. It should be added that the Berkman HPP operation start date is due to the start of operation of the first unit for clarification. b) Please show indices for Mwe and MWm in all PDD c) Please show reference for 239,946 MWh electricity per year, if number is wrong please revise excel and PD accordingly. d)Please show reference for 100.2481 GWh and 239,946 MWh.	1.1.1.1	a)It's been added. b)Indices have been shown as MWe and MWm. c)Revision have been made in the PD. d) Reference has been added.	Review 1: a)Ok Closed (Added) b) Ok Closed (Stated) c) Ok Closed (Stated) d) Ok Closed (Stated)
CAR-3 a)The first crediting period is given in the PD. It should be clarified with adding the sentence "It is the first crediting period." b)The reason why the crediting period is taken as 8 years instead of 10 years should be stated. c) In PDD 1.9 please state that "03 June 2010	1.9	a)It's been added. b)The typo has been corrected. c) It's been added.	Review 1: a)Ok Closed (Stated) b) Ok Closed (Corrected) c) Ok Closed (Stated)

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

Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
to 02 June 2020" is CP 1			

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

Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
CAR-4 For the year 2024, it should be 137,288 tCO2. Also, between 01.01.2028 - 02.06.2028 it should be 57,608. Because February has 29 days in 2024 and 2028. The total estimation value should also be adjusted accordingly. Also, the total crediting period is stated as 10 years, but the calculation covers 8 years. It should be corrected.	1.10	It's been corrected.	Review 1: Ok Closed (All corrected)
CAR-5 The reason for the electricity generation of HPPs is indicated as "depending on the water flow." But these estimated values are taken from the PD which belongs to first crediting period and it is stated in that PD as "Electricity generation projection has been made for every 5 years according to historical flow data of the river and future flows of upstream dams. Thus this figure reflects the average generation projection between the years 2010-2030." This expression should be added.	1.11	The related expression has been added.	Review 1: Ok Closed (Added)
CAR-6 Please revise first sentence in 2.2 of MR	2.2.4	It's been revised.	Review 1: Ok Closed (Corrected)
CAR-7 "EIA is not required" date appears as 06/06/2002 in the document. It is stated as August 2003 in PD. This contradictory should be corrected.	2.3.3	The decision date of the "EIA is not required" is 21/08/2003.	Review 1: Ok Closed (Corrected)
CAR-8 Please state all relevant tools used for this CP.	3.1.1	Related parts have been revised.	Review 1: Ok Closed (Tools stated)

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

Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
"Tool to determine the remaining lifetime of equipment "-version 01" should be added. Also, for the monitoring plan, ACM0002 v12.1.0 is mentioned, please revise			
CAR-9 Please state power density in MR and excel	3.2.4.3	Both the MR (section 4.2) and the excel have been revised.	Review 1: Ok Closed (Power density stated)
CAR-10 Please state exactly from which documentation the generation data will be verified and also cross checked and if this is a deviation from first PDD, please state in Current PDD.	3.6	It's been added under $EG_{facility,y}$. It's not a methodology deviation, so we have not added.	Review 1: Ok Closed (Explained)
CAR-11 a) Please explain how many employees does the PP employ and how many are locals, Please provide evidence and correct this sentence "there are five accounting personnel, five maintenance personnel, two service personnel and fifteen security guards. In total, forty-seven employees are working for the Project Activity" b)In previous PDD surface area, number of employment, Livelihood of the poor, Environmental Indicators (during operation) are also monitored, please explain them in MR and provide evidences.	5.2.1	a) Section 5.2 has been revised accordingly. Section 5.3 has been revised accordingly. b) The parameters, number of employment and livelihood of the poor have been added. Surface area has been omitted, since there is no surface area and no need to monitor this, as no change is expected. Environmental Indicators have been requested to be omitted by VERRA during the last verification review.	Review 1: a)Ok Closed (Records provided) b) Ok Closed (Explained)
CAR-12 Yes, but latest test dates should be changed to 14/10/2019 on meters which their serial numbers are 8923874, 8923875, 8923876	5.2.11	All have been revised.	Review 1: Ok Closed (Corrected)

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

Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
and 84260477. Also, "Latest two meters test dates are 30/10/2018 and 11/10/2019" sentence should be changed to 14.10.2019.			
CL-1 It should be stated that the project activity is a greenfield project in this section as well.	1.1.1.4	It's been added.	Review 1: Ok Closed (Added)
CL-2 The way of calculating electricity generation is not stated in the PD as "Electricity generation projection has been made for every 5 years according to historical flow data of the river and future flows of upstream dams. Thus this figure reflects the average generation projection between the years 2010-2030." It should be added.	1.1.1.5	It's been added.	Review 1: Ok Closed (Added)
CL-3 The lifetime of the project activity is not indicated. It should be added.	1.11.5	It's been added.	Review 1: Ok Closed (Added)
CL-4 "The meeting was recorded via handy cam and an official written record was signed by the village heads in the project region." is stated in the PD which belongs to first crediting period. This statement should be added in this PD as well.	2.2.1.4	Section 2.2. has been revised accordingly.	Review 1: Ok Closed (Added)
CL-5 a)Please provide photos of all meters b) Please revise "since they are sealed95 no one"	5.2.9	The photos have been provided.	Review 1: a)Ok Closed (Added) b) Ok Closed (corrected)
CL-6 Any review document from VCS for last	5.3.13	The review document is available to the VVB.	Review 1: Ok Closed (No issues to handle in

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

Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
verification?			this CP renewal)
CL-7 Additionality tool is not really used in this PDD, please remove		It's been removed	Review 1: Ok Closed (Revised)
CL-8 The stepwise application as indicated in the tool 'Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period' is not indicated in the PDD.		Section 3.4. has been updated	Review 1: Ok Closed (Revised)
CL-9 The derivation of the grid emission factor including the relevant weights to be applied for OM and BM are not presented in the PDD.		Section 4.1 has been revised accordingly.	Review 1: Ok Closed (Revised)
CL-10 Wind and solar power generation project activities: wOM = 0.75 and wBM = 0.25 (owing to their intermittent and non-dispatchable nature) for the first crediting period and for subsequent crediting periods; so please revise CM to 0,6482, please correct excel and MR		Section 4.1 and the values have been revised accordingly.	Review 1: Ok Closed (Revised)

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

ANNEX 2: VALIDATION TEAM AND ITR COMPETENCE

Mrs. Fikriye Seda ATABEK holds B.Sc. degree in “Chemical Engineering” and a M.Sc. degree in “Energy Science and Technology”. She is a lead auditor and trainer for ISO 50001 and since 2004 has been working in the fields of “Management systems”, “ISO 14064” and “Energy Management in Industry”. She has been involved in many GS and VCS projects as ITR, Team Leader, Validator or Verifier since 2010. With re-carbon, Seda is a free-lance Team Leader and ITR.

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

Mr. Sandeep KANDA holds a degree in Mechanical Engineering, Masters in Energy systems engineering from Indian Institute of Technology – Bombay and Post Graduate Diploma in Industrial Safety & Environmental Management from National Institute of Industrial Engineering in India. He has more than ten years of work experience with auditing and consultancy firms, seven years thereof with Designated Operational Entities under the CDM. He is experienced working on diversified areas of energy and environmental management, including policies, Clean Development Mechanism (CDM), Corporate Sustainability Reporting (CSR) Audits, energy audits, utility audits and product development. As CDM auditor and technical reviewer for TÜV Süd, he has audited more than 30 CDM projects as technical reviewer; 40 projects as lead auditor and 7 PoAs in various capacities; covering a broad range of sectoral scopes, such as Energy industries (renewable - / non-renewable sources), Energy distribution, Energy demand, Manufacturing industries, Chemical industries, Transport, Metal production, Waste handling & disposal and Agriculture. He has been working as a contracted team leader, technical reviewer, TA 1.1 and renewable energy expert in the context of Re Carbon.

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Annex 2-1: Appointment Certificates

Re Carbon Gözetim Denetim ve Belgelendirme Ltd. Şti. Prof. Dr. Aziz Sancar Cad. 27/6 TR / 06690 Çankaya-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 **Mr. Sandeep KANDA** as a confirmation of compliance with internal qualification requirements as follows:

Clean Development Mechanism				
Validator	**Verifier**	**Team leader**	**Technical reviewer**	**Technical Expert**
08-02-2021	08-02-2021	08-02-2021	08-02-2021	08-02-2021

Verified Carbon Standard, Gold Standard, World Commission on Dams, Social Carbon				
Validator	**Verifier**	**Team leader**	**Technical reviewer**	**Technical Expert**
08-02-2021	08-02-2021	08-02-2021	08-02-2021	08-02-2021

Speciality	**Regional (Country) expertise**	**Financial expertise**	**Technical area**
N/A	India, Vietnam, Nepal and Turkey	N/A	1.1, 1.2, 2.1, 3.1, 4.1, 9.1, 9.2, 13.1, 13.2 & 15.1

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. Anıl SÖYLER	Certification Manager	08-02-2021	
Name	**Position**	**Date**	**Signature**

F-C-053 / 03.02.2021 - 02

Re Carbon Gözetim Denetim ve Sürdürülebilirlik Ltd. Şti.
Prof. Dr. Adil Sancar Cad.
27/8
TR / 06830 Çankaya Ankara
Tel.: 0090-312-287 6122
Fax: 0090-312-287 3373

Certificate of Appointment

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
08-02-2021	08-02-2021	N/A	N/A	08-02-2021

Verified Carbon Standard, Gold Standard, World Commission on Dams, Social Carbon				
Validator	Verifier	Team leader	Technical reviewer	Technical Expert
08-02-2021	08-02-2021	08-02-2021	08-02-2021	08-02-2021

Speciality	Regional (Country) expertise	Financial expertise	Technical area
N/A	Turkey	N/A	1.2, 2.1 and 3.1

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. Anıl SÖYLER	Certification Manager	08-02-2021	
Name	Position	Date	Signature