GS PROJECT RENEWAL OF CREDITING PERIOD VALIDATION REPORT

Alize Enerji Elektrik Üretim A.Ş.

Çataltepe 16 MW Wind Farm Project, Turkey

IN TURKEY

PROJECT NUMBER:878

Organizational Unit:	Re Carbon Ltd.		
Project Title:	Çataltepe 16 MW Wind Farm Project, Turkey		
Project Number:	**Client:**		**Current PDD Version:**
878	Alize Enerji Elektrik Üretim A.Ş.		6
Date of First Issue:	**Date of Current Version:**	**Version Number:**	**Number of Pages:**
12/12/2022	30/06/2023	06	118

Summary:

Host Country: Turkey

Project is Reviewed Against:

☒ Kyoto Protocol ☒ UNFCCC CDM Rules and Regulations and associated documents

☒ Gold Standard Rules and Regulations v1.2 ☐ Other (Please Specify)

Methodology: ACM0002 **Version:** 21.0

Project Developers: Alize Enerji Elektrik Üretim A.Ş. ; Çağla Balcı Eriş-Rüzgar Danışmanlık

Average Annual Emission Reduction Estimate in the 2nd Crediting Period: 26,693 tCO_2e

Project Size: ☒ Large Scale ☐ Small Scale ☐ Micro Scale

Registry Number:	**Crediting Period Renewal No:**	**Crediting Period Start Date:**
GS574	☒ 1st ☐2nd	19/04/2018

Validation Stages:

☒ Desk Review ☒ Site Visit ☒ Follow-up Interviews

☒ Resolution of Outstanding Issues

Validation Findings: During the validation 13 Corrective Action Requests and 00 Clarification Requests were raised, all of which were closed out before the issuance of this validation report. 00 Forward Action Requests were raised during the validation all of which shall be addressed during the initial verification of the proposed project activity.

In summary, it is Re Carbon Ltd.'s opinion that the project activity "Çataltepe 16 MW Wind Farm Project, Turkey" in Turkey, as described in the PDD, version 6 and dated 23/06/2023, meets all relevant UNFCCC requirements for the CDM, GS and all relevant host Party criteria and correctly applies the baseline and monitoring methodology ACM0002, version 21.0. Hence, Re Carbon Ltd. requests the renewal of crediting period of this registered GS project activity.

Validation Team Leader:	Mrs. Fikriye Seda ATABEK	**Indexing Terms:**
Validation Team Members:	Ms. Öykü YAKUPOĞLU- Validator	☒No distribution without permission of the client or responsible organizational unit

Approved By (Technical Reviewer):	**Name:**	**Signature:**	☐ Limited Distribution
	Mr. Anıl SÖYLER		☐ Unrestricted Distribution

Abbreviations

BM : Build Margin
CAR : Corrective Action Request
CDM : Clean Development Mechanism
CER : Certified Emission Reduction(s)
CL : Clarification request
CM : Combined Margin
CO_2 : Carbon dioxide
CO_2e : Carbon dioxide equivalent
DNA : Designated National Authority
DOE : Designated Operational Entity
DR : Document Review
EF : Emission Factor
EIA : Environmental Impact Assessment
ER : Emission Reductions
ERPA : Emission Reduction Purchase Agreement
FAR : Forward Action Request
FSR : Feasibility Study Report
GHG : Greenhouse gas(es)
GS : Gold Standard
GS4GG: Gold Standard for Global Goals
GWP : Global Warming Potential
I : Interview
IPCC : Intergovernmental Panel on Climate Change
IRR : Internal Rate of Return
kWh : Kilo Watt Hour
LoA : Letter of approval
MoV : Means of Validation
MW : Mega Watt
MWh : Mega Watt Hour
NCV : Net Calorific Value
NGO : Non-governmental Organisation
ODA : Official Development Assistance
OM : Operating Margin
PDD : Project Design Document
PD : Project Developer(s)
tCO2e : Tonnes of CO2 equivalents
UNFCCC: United Nations Framework Convention on Climate Change

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1. EXECUTIVE SUMMARY – VALIDATION OPINION

Re Carbon Ltd. performed the second crediting period validation of the "ÇATALTEPE 16 MW WIND FARM PROJECT, TURKEY" in "Turkey" between 02/05/2022 and 05/01/2023. The validation was performed on the basis of UNFCCC criteria for the Clean Development Mechanism (CDM), Gold Standard for Global Goals (GS4GG) v1.2 and Host Party criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

As a result of validation, Re Carbon Ltd. concludes the following:

☒ The review of the project design documentation and the subsequent follow-up interviews have provided Re Carbon Ltd. with sufficient evidence to determine the fulfillment of all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM and Gold Standard for Global Goals. Therefore, Re Carbon Ltd. recommend the renewal of crediting period of the project by Gold Standard.

☐ The review of the project design documentation and the subsequent follow-up interviews have not provided Re Carbon Ltd. with sufficient evidence to determine the fulfillment of all stated criteria. Therefore, Re Carbon Ltd. do not recommend the renewal of crediting period of the project by Gold Standard and will inform the project developer(s) and Gold Standard on this decision.

2. INTRODUCTION

2.1. Objective

Re Carbon Ltd. was appointed by "Alize Enerji Elektrik Üretim A.Ş." to perform the crediting period renewal validation of the "Çataltepe 16 MW Wind Farm Project, Turkey" in Turkey through a contract dated 09/05/2022. The objective of this validation activity is to have an independent third party for the assessment of the project and to ensure that the selected baseline, estimated emission reductions and monitoring plan is still in line with the applied methodologies and the applicable CDM and GS4GG V1.2 requirements. In particular;

- the project's baseline is assessed against "Combined tool to identify the baseline scenario and demonstrate additionality", Version 07.0 and
- Tool: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period version 3.0.1
- the project's monitoring plan is assessed against "ACM0002: Grid-connected electricity generation from renewable sources", Version 21.0
- 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 for project activities version 3.0
- CDM Project Standard for project activities version 3.0
- GS4GG V1.2 and other relevant GS4GG V1.2 requirements

Validation is a requirement for all GS projects that are requesting a renewal of crediting period and is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of verified emission reductions (VERs).

2.2. Scope

The scope of the validation is the independent and objective review of the Project Design Document (PDD) which is revised for second crediting period. The PDD is reviewed against the relevant criteria (see Section 2.1) and decisions by the CDM Executive Board, including the approved baseline and monitoring methodology. The validation was based on the guidance given in the CDM Validation and Verification Standard for project activities version 3.0, CDM Project Standard for project activities version 3.0, GS4GG V1.2 and other relevant GS4GG V1.2 requirements.

The validation team employed a risk-based approach to assess the completeness and accuracy of the claims and conservativeness of the assumptions in the PDD. The main focus of the validation team is to determine if the identified baseline is still applicable to the project activity,

if the estimated emission reductions for the second crediting period are still conservative and if the monitoring plan is still feasible for the project activity.

The only purpose of the validation is its usage during the renewal of crediting period process as part of the GS project cycle. Therefore, Re Carbon Ltd. cannot be held liable by any party for decisions made or not made based on the validation opinion, that will go beyond that purpose.

2.3. GHG Project Description

The "Çataltepe 16 MW Wind Farm Project, Turkey" (hereafter referred to as the "project activity") is operated by Alize Enerji Elektrik Üretim A.Ş.. The project activity has the installed capacity 16 MWm/ 16 Mwe. It is located in Çataltepe village, Havran district of Balıkesir province, Marmara Region. The annual estimated electricity generation value is 41,143.028 MWh based on the average value of the project activity's electricity generation between 2012 and 2021. The evidence showing annual generation data is provided to VVB. The annual estimated emission reduction value is 26,693 tCO2 with respect to the published emission factor which is 0.6488 tCO2/MWh by Turkish Republic Ministry of Energy and Natural Resources.

The purpose of the project activity is to produce renewable electricity using Wind as the power source and contribute to Turkey's electricity demand.

Starting and ending of first crediting period are 19/04/2011-18/04/2018 (validated via Final PDD is version 10 with dated 14/03/2011, Final first validation report version 9 with dates 23/11/2010 and First verification report version 1.1 with dated 28/09/2012). The second crediting period start date is 19/04/2018 and the end date is 18/04/2025. The length of the crediting period is 7 years 0 months renewable once.

Turbine coordinates have been verified on site as below:

	E	N	E	N
Turbine Nr	**UTM Coordinates**		**Longitude / Latitude**	
T1	512066	4374648	27° 08' 25''	39° 31' 17''
T2	512130	4374493	27° 08' 28''	39° 31' 12''
T3	512182	4374331	27° 08' 30''	39° 31' 07''
T4	512176	4375322	27° 08' 30''	39° 31' 30''
T5	512232	4375164	27° 08' 32''	39° 31' 34''
T6	513326	4374529	27° 09' 18''	39° 31' 13''
T7	513515	4374480	27° 09' 26''	39° 31' 11''
T8	513643	4374376	27° 09' 31''	39° 31' 08''

The Project does not include additional 5 units of E92 turbines with an output of 2,350 kWe/2,350 kWm and a rotor diameter of 92 m. The unregistered turbines of the Cataltepe WPP according to

generation license are T9, T10, T11, T12 and T13. The electricity generation of these 5 turbines will not be included during the monitoring periods of CP2. Below are the coordinated verified.

	E	N		E	N
T1	512066	4374648	T8	513643	4374376
T2	512130	4374493	T9	512270	4374168
T3	512182	4374331	T10	513102	4374771
T4	512176	4375322	T11	513987	4375172
T5	512232	4375164	T12	513927	4374857
T6	513326	4374529	T13	513859	4374560
T7	513515	4374480			

These additional turbines have been commissioned on 08/02/2019 and 28/02/2019.

2.4. Parties Involved

Alize Enerji Elektrik Üretim A.Ş. is the project developer and host country is Turkey.

3. METHODOLOGY

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 PDD to reflect the most recent situation for the project activity, via a desk review of the revised PDD between 02/05/2022 and 05/01/2023.
- Assessment whether the applied methodology ACM0002: Grid Connected electricity generation from renewable sources, version 21.0, in the revised PDD has been applied correctly, including the baseline selection and monitoring plan.
- A physical site visit was conducted on 03/05/2022 in order 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 renewal of crediting period validation report
- Independent technical review (ITR)
- Approval of the validation report and request of renewal of crediting period

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 GS-PDD-FORM, GS4GG V1.2 and CDM Renewal of Crediting Period validation requirements)
- Table 2 (Resolution of Corrective Action, Forward Action and Clarification Requests)

The usage description of Table-1 in Validation Protocol is explained in Table 3-1 below:

Table 3-1: Explanation about Table-1 in Renewal of Crediting Period Validation Protocol

Question	Reference	MoV*	Findings, comments, references and document sources	Draft & Final Conclusion
The requirements related with the GS-PDD Form, GS4GG and CDM Renewal of Crediting Period validation Standards and/ or Procedures	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 verification

The usage description of Table-2 in Validation Protocol is explained in Table 3-2 below:

Table 3-2: 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 Developers' 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 developers regarding the non-conformities	Is used to summarize the responses by validation team and their conclusions

The Validation Protocol is filled out 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.

3.1. Validation Team and ITR Selection

The appointment process of the validation team takes into account the technical area(s), sectoral scope(s), and the related host country experience required amongst team members for the accurate and thorough assessment of the project design. The relevant GS validation and previous ITR experiences are also assessed during the selection of the team members and the Independent Technical Reviewer (ITR), respectively. The validation team and ITR were assigned to this validation activity on 09/05/2022 taking all the above factors into consideration and as a result of the contract review process.

The validation team members and ITR are listed in Table 3-3 below:

Table 3-3: Validation team and ITR details

Name	Role	Host Country Experience	Scope Coverage	Technical Expertise	Financial Expertise	Involvement*
Mrs. Fikriye Seda ATABEK	Team Leader	☒	☒	☒	☐	A, DR, SV, R
Ms. Öykü YAKUPOĞLU	Validator	☒	☒	☒	☐	A, DR, SV, R
Mr. Anıl SÖYLER	ITR	☒	☒	☒	☐	ITR

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

A : Administrative

DR : Desk Review

SV : Site Visit

R : Reporting

ITR : Independent Technical Review

3.2. Desk Review of the PDD and Additional Documents

The basis for the crediting period renewal validation activity is the PDD version 01, dated 02/05/2022 which was submitted to the validation team on 02/05/2022. This PDD was revised several times due to the raised CARs and CLs, version 6 dated 23/06/2023 being the final version. The PDD was assessed against;

- The project's baseline is assessed against ACM0002: Grid-connected electricity generation from renewable sources, version 21.0
- Tool for the demonstration and assessment of additionality, version 07.0.0
- Tool to calculate the emission factor for an electricity system, version 07.0
- Tool to determine the remaining lifetime of equipment, Version 01
- Combined tool to identify the baseline scenario and demonstrate additionality, Version 07.0
- Tool to calculate project or leakage CO2 emissions from fossil fuel combustion, Version 03.0
- the Host Country criteria
- CDM Validation and Verification Standard for project activities version 3.0,
- CDM Project Standard for project activities version 3.0
- GS4GG V1.2 and other relevant GS4GG V1.2 requirements
- and other relevant documents, rules and regulations listed in section 2.1 of this report

A list of all the documents that were reviewed can be found in Section 6 of this renewal of crediting period validation report.

3.3. Site Visits

As a part of the validation activities a physical site visit was performed to the project activity site, details of which can be seen in the Table 3-4 below:

Table 3-4: Site visit details

Date	03/05/2022	
Location	Havran, Balıkesir	
Participant	**Company Name**	**Role in the Organization / Role in the Site Visit**
Melahat Cosgun	Kocadağ Village	Female Stakeholder
Nefise Balaban	Kocadağ Village	Female Stakeholder
Şükran Coşgun	Kocadağ Village	Female Stakeholder
Emine Küsür	Kocadağ Village	Female Stakeholder
Dudu Coşgun	Kocadağ Village	Female Stakeholder
Sevim Coşgun	Kocadağ Village	Female Stakeholder
Feride Baran	Kocadağ Village	Female Stakeholder
Ahmet Küsür	Kocadağ Village	Muhtar
Fahri Coşgun	Kocadağ Village	Stakeholder
Muhterem Balaban	Kocadağ Village	Stakeholder
Mehmet Çelebi	Kocadağ Village	Stakeholder
Öykü Yakupoğlu	Re Carbon Ltd.	Trainee Validator
Fikriye Seda Atabek	Re Carbon Ltd.	Team Leader

Points Verified	**Source of Information**
To check the project development and operation	Document review and on-site visit
To interview with the local stakeholders about the project and its impacts	On-site visit and interviews with the local stakeholders from Kocadağ Village
To confirm rightness of project description, as per PDD including project components and location	Document review, on-site visit and interviews with the local stakeholders from Kocadağ Village

Besides a complimentary stakeholder consultation has been held from 13/04/2022 until 13/05/2022 and no comments have been received. The signed declaration that the comments logbook has been received by local market owner has been provided to VVB. Logbook seen during on site visit, comment by local market owner states there are no complaints. Local market owner has kept the logbook during this period. The location of book is easily accessible by all villagers.

3.4. Reporting of Findings via the Validation Protocol

During the validation period, a Validation Protocol which is attached in Annex 1 to this crediting period renewal validation report was used to submit the findings to the project developers.

As part of this validation report, please see "**Attachment to Renewal of Crediting Period Validation Report / GS4GG Audit Techniques Template for Validation**" for details of Audit Techniques used and risk assessment.

In line with the CDM Validation and Verification Standard, 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 raised is explained below:

- The Validation team raises a **CAR** if one of the following occurs:
  - The project developers have made mistakes that influences the ability of the project activity to achieve real, measurable additional emission reductions
  - The CDM and/or GS4GG 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 GS4GG requirements have been met.
- The Validation team raises a **FAR** during validation to highlight issues related to project implementation that require review during the verification of the project activity.

According to these principles, a total of 13 CARs, 00 CLs and 01 FARs were raised, all of which are listed in the Validation Protocol.

3.5. Follow-Up Interviews

During the validation period follow-up interviews were executed by the validation team in order to further analyze the correctness and accurateness of the information provided. A list of individuals interviewed is given in Section 5 of this Validation Report.

3.6. Resolution of Outstanding Issues

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

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

The validation timeframe is given in detail in Table 3-5 below:

Table 3-5: Validation Timeframe

Activity	Timeline		Total Days
	From	To	
Desk Review	02/05/2022	02/05/2022	1
Review of the PDD version 01	02/05/2022	05/05/2022	3
Site Visit	03/05/2022	03/05/2022	1
Issuance of the Validation Protocol version 01	07/10/2022	07/10/2022	2
Review of PDDs Initial Set of Responses	10/10/2022	10/10/2022	1
Closing of all the CARs and CLs	28/11/2022	28/11/2022	0
Issuance of the Validation Report version 01	10/12/2022	10/12/2022	1
ITR Process	12/12/2022	12/01/2023	32
Issuance of the Validation Report version 02	09/01/2023	09/01/2023	1
Issuance of the Validation Report version 03	11/01/2023	12/01/2023	2
Submission for Final Approval	12/01/2023	13/01/2023	2
Submission of Final Documents to the PD	13/01/2023	13/01/2023	1
GS Review Round 1	31/03/2023	31/03/2023	1
Issuance of the Validation Report version 04	31/03/2023	31/03/2023	1
GS Review Round 2	16/05/2023	16/05/2023	1
Issuance of the Validation Report version 05	16/05/2023	16/05/2023	1

Information or clarifications provided as a response to a CAR, CL or FAR could also lead to a new request. This can also be seen transparently in the Validation Protocol provided in Annex 1 of this Validation Report.

3.7. Internal Quality Control

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

The Independent Technical Review is performed by another Team Leader of RE-Carbon Ltd. who was not involved in the validation activities of this specific project activity. When the appointed Team Leader finalizes the Validation Report, the report is sent to the (for this project specifically

appointed) Independent Technical Reviewer who reviews not only the validation report itself, but also all supporting documents like emission factor calculations, additionality justifications, relevant excel sheets etc.

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

After all CLs and CARs are closed, the validation report is again reviewed and finally approved by the Team Leader, ITR and the Certification Manager, and the request for registration is submitted to the Gold Standard along with the relevant documents.

4. VALIDATION FINDINGS

4.1. Baseline Scenario

The project activity was earlier registered using the methodology ACM0002 version 07. The PDD has been updated using the latest approved version of the methodology ACM0002 version 21. All the applicability conditions of the methodology have been justified appropriately in the revised PDD version 6 dated 23/06/2023.

The PD 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 VVB has checked the application of the aforesaid tool and confirms that it has been correctly applied.

There has been no significant change in the relevant policies and circumstances, which would impact the baseline scenario since 14/03/2011 (date of initial PDD) till date. The earlier registered PDD takes into account all the relevant national and sectoral policies and circumstances that were applicable as on date. The discussion on the same has also been provided in the updated PDD.

The project activity is supplying 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 would have otherwise 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".

Further, the emission factor has been updated and fixed ex-ante 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 grid emission factor ($EF_{grid,CM,y}$) in the earlier registered PDD was 0.635 tCO_2/MWh whereas the grid emission factor ($EF_{grid,CM,y}$) in the updated PDD is 0.6488 tCO_2/MWh as per the published emission factor by Turkish Republic Ministry of Energy and Natural Resources.

The same has been checked from the following link and the document available: https://enerji.gov.tr//Media/Dizin/EVCED/tr/%C3%87evreVe%C4%B0klim/%C4%B0klimDe%C4%9Fi%C5%9Fikli%C4%9Fi/TUESEmisyonFktr/Belgeler/Bform2020.pdf

No updates in policy and regulatory framework comparing with the initial validation process have been found in Turkey. Therefore, it can be concluded that the baseline scenario has not changed and continues to be the same as during the second crediting period.

No new additionality assessment has been done for CP renewal validation.

4.2. Application of the Selected Baseline and Monitoring Methodology or Standardized Baseline

The project activity was earlier registered using the methodology ACM0002 version 07. The PDD has been updated using the latest approved version of the methodology ACM0002 version 21. The PDs have used the most recent version of the same methodology as the original registered PDD, i.e., the version that is valid at the time of submission of the revised PDD for the renewal of the crediting period.

The project activity applies approved consolidated baseline and monitoring methodology "ACM0002 version 21.0: "Consolidated baseline methodology for grid-connected electricity generation from renewable sources" and the associated tools:

- Tool for the demonstration and assessment of additionality, version 07.0
- Tool to calculate the emission factor for an electricity system, Version 07.0
- Combined tool to identify the baseline scenario and demonstrate additionality, Version 07.0
- Tool to calculate project or leakage CO2 emissions from fossil fuel combustion, Version 03.0
- Tool to determine the remaining lifetime of equipment, Version 01
- Tool 11: 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

According to ACM0002 version 21.0, the latest approved tools shall be referenced in the PDD like, "Tool for the demonstration and assessment of additionality" (version 07.0), "Tool to calculate the emission factor for an electricity system" (Version 07), "Combined tool to identify the baseline scenario and demonstrate additionality" (Version 07.0), "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion" (Version 03.0), "Tool to determine the remaining lifetime of equipment" (version 01), "Tool 11: 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" which are the latest versions of the mentioned tools valid at the starting time and the above tools are applied to the GS-PDD. Therefore, it could be concluded that the title, version and reference of the methodology including the associated tools are correct and valid.

Double Counting:

VVB has checked the I-REC Registry (https://v-1.evident.app/Public/ReportDevices/), wherein 354 projects from Turkey are listed as of the validation report date and this project isn't available within I-REC Registry database. Similarly, VCS project database (http://vcsprojectdatabase.org/#/home) and GCC project database (https://projects.globalcarboncouncil.com/pages/submitted_projects) were checked and this project isn't available within VCS and GCC projects' databases, either. Given that CDM projects are not applicable in Turkey and the project does not appear on domestic REC scheme, I-REC and VCS registries, it could be confirmed that no RECs and other VER carbon credits are being issued for the project at the time of this validation.

Additionality: The capacity increase was not added in the GS project. PP has already submitted financial situation under ongoing financial need without capacity increase. So, the capacity increase has not negative or positive impact on the additionality of the project. And social and environmental impact of capacity increase has already assessed under Appendix 1 of the PDD. So there is no negative impact on these too.

Ongoing Financial Need:

The project is not financially attractive. Therefore, carbon revenues are crucial for the project. The income of the GS VER is very important for the financial performance of the project and GSVERs price has been increased. So, the results of the financial analysis still same for the project, with the decision to go ahead was made 7 years ago, both with and without VER financing. This therefore indicates that in comparison to alternative investments, the Project was still financially unattractive in the absence of VER financing.

The second crediting period start on 19/04/2018 so PP has submitted deviation request to GS and GS has approved for issuance of VERs 3 years beginning of on-site visit 03/05/2022 which means PP can issue credits between 03/05/2019 to 02/05/2022 from 2nd crediting renewal period. And then PP will continue other verification process later for between 03/05/2022 and 18/04/2025. VVB approves that PP currently needs credits to financially support the project.

4.3. Monitoring

SDG13: Climate Action and SDG 7: Affordable and Clean Energy: According to ACM0002 version 21.0, one of the parameters required to be monitored is "net electricity supplied by the proposed project to the grid in year y, $EG_{facility,y}$ which will be continuously measured and recorded at least monthly.

Net electricity generation will be based on measured value of electricity export and import and recorded via meters sealed by TEIAS (the distribution and grid company) for billing purposes therefore no new additional protocol will be needed for monitoring emission reduction. According to meter reading protocols, the internal consumption of the facility was subtracted from the gross generation. EPIAS records will be used as the main source for the quantity of net electricity delivered to the grid, and it has been cross checked automatic meter reading system (OSOS).

The site electricity technicians and plant manager will be responsible for the electricity generated, gathering all relevant data and keeping the records.

There are two electricity meters, one main meter and one back up meter. 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. Installation of the meters and data monitoring will be carried out according to the relevant regulation by TEIAS which will record the meter readings via EPIAS system and through remote reading. EPIAS records will be used as the main source for the quantity of net electricity delivered to the grid, and it has been cross checked automatic meter reading system (OSOS). The details about the currently available electricity meter details are as follow as in the table below:

Model	Serial Number	Accuracy Class
Landis Gry	Main Meter: 51052836	0.2s active 0.5 re-active
EMH LZQJ-XC-P2FB	Back-up Meter: 6839363	0.2s active 0.5 re-active

The previous primary meter has serial number 53064334 and changed on 06/10/2017 and previous secondary meter has serial number 53064335 and changed on 10/11/2017.

All data will be kept for at least two years after the crediting period for QA/QC purposes. The calibration and maintenance of the meters will be carried out in line with the "Regulation of Metering and Testing of Metering Systems" (Mevzuat Bilgi Sistemi). The calibration frequency of the meters is 10 years. The meters will be calibrated by TEIAS when there is an inconsistency between main and back-up meters.

The project's capacity was increased to 27.75 MW from 16 MW but monitoring is very easy. And monitoring of net energy generation (SDG7), PP will simply subtract the SCADA values of unregistered turbines from gross generation data of EPIAS. VVB approves that this way of monitoring is suitable to separately monitor the capacity increase.

The annual estimated electricity generation value is 41,143.028 MWh based on the average value of the project activity's electricity generation between 2012 and 2021. In the registered PDD for CP1, this value was 62,414 MWh/year. It is seen that the realized values are much lower than the estimated.

Besides, validation team has not identified emission sources that are not addressed by the applied methodology which are expected to contribute more than 1% of the annual emission reduction.

SDG 8: Decent Work and Economic Growth: The project contributes to the following indicators 8.5.2 "Unemployment rate, by sex, age and persons with disabilities" and following target: "8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value" The target will be monitored by the number of employment generation with the social security records and Health and Safety Training Records during the verification process.

SDG Impact tool has been prepared by PP and reviewed by VVB. VVB confirms that the tool correctly defines the SDG impacts. All related safeguarding principles have been included in the assessment.

Safeguarding Principles:

Principle 9.4 Release of pollutants: Disposal of the waste water: The employees produce insignificant amount of wastewater during the operation of the proposed project activity. This wastewater has been collected in an impermeable septic tank and collected via vacuum trucks by Manisa municipality and disposed according to Regulation on Control of Water Contamination. Evidences provided to VVB for 2020-2021.

Safeguarding Principle 9.5: Hazardous and Non-hazardous Waste: national legal disposal requirements have been applied. Licensed private companies have collected the waste oil on site and dispose it properly. The selected Enercon turbines have minimal moving components and can operate for years without oil change. The turbines are also equipped with oil absorption systems which prevent any leaks, thereby minimizing the risk of spillage and soil contamination.

Principle 9.10 High Conservation Value Areas and Critical Habitats: Observations around the project area will be done for monitoring birds and carcass once for each monitoring period.

Verification report of first monitoring period (19/04/2011 to 31/07/2012) did not state any FARs. Related Issuance Review by GS also does not indicate any FARs.

By document review and on-site visit observations, it is also confirmed by the validation team that the monitoring plan can be properly implemented, 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 emission reductions to be achieved by the project activity can be properly reported and verified.

Therefore, Re Carbon Ltd. Can confirm that the list of parameters that need to be monitored ex post for the second crediting period is complete and consistent with the relevant applied methodology which is ACM0002 version 21.0.

4.4. Calculation of Emission Factor and Emission Reductions

The emission reduction calculation estimations have been included in the PDD in line with the latest approved version of the methodology ACM0002 version 21.0. The baseline emissions are calculated based on the combined emission factor multiplied by the expected net electricity generation, which amounts to 26,693 ton CO2 per annum.

Emission factor had been calculated in line with the selected methodology and the Ministry of Energy and Natural Resources document named as "Turkey's National Electricity Network Emission Factor Factsheet, EF of wind and solar plants" as 0.6488 tCO2/MWh.

Bey = 41,143.028MWh/yr * 0.6488 tCO2/MWh= 26,693 tCO2e/year

As the proposed project activity is a new grid-connected Wind power plant. For this reason, PE_y is considered as "0" in line with ACM0002 Version 21.0

There are no project emissions or leakage emissions associated with the Wind power project. Thus, the emission reductions correspond to the baseline emissions and the project is expected to result in an average emission reduction of 26,693 tCO_2e/year during the second crediting period.

$Ery = BE_y – Pey – LE_y$

$LE_y = 0$, $PE_y = 0$

$ER_y = BE_y = 26,693$ tCO2e

4.5. Sampling Plan

No sampling was deemed necessary and the validation process includes the whole project.

5. LIST OF INDIVIDUALS INTERVIEWED

The list of individuals who were interviewed during the validation period is given in the Table 5-1 below:

Table 5-1: List of individuals interviewed

Reference Number	Means of Interview[1]	Full Name	Title	Organization
1	SV	Melahat Cosgun	Kocadağ Village	Female Stakeholder
2	SV	Nefise Balaban	Kocadağ Village	Female Stakeholder
3	SV	Şükran Coşgun	Kocadağ Village	Female Stakeholder
4	SV	Emine Küsür	Kocadağ Village	Female Stakeholder
5	SV	Dudu Coşgun	Kocadağ Village	Female Stakeholder
6	SV	Sevim Coşgun	Kocadağ Village	Female Stakeholder
7	SV	Feride Baran	Kocadağ Village	Female Stakeholder
8	SV	Ahmet Küsür	Kocadağ Village	Muhtar
9	SV	Fahri Coşgun	Kocadağ Village	Stakeholder
10	SV	Muhterem Balaban	Kocadağ Village	Stakeholder
11	SV	Mehmet Çelebi	Kocadağ Village	Stakeholder
12	SV	Öykü Yakupoğlu	Re Carbon Ltd.	Trainee Validator
13	SV	Fikriye Seda Atabek	Re Carbon Ltd.	Team Leader

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

6. LIST OF DOCUMENTS REVIEWED

The list of the documents which were reviewed during the validation period is given in Table 6-1 below:

Table 6-1: List of documents reviewed

Document Number	Document Name	Version	Date (dd/mm/yyyy)
D01	PDD for the 2nd Crediting Period	1	02/05/2022
D02	PDD for the 2nd Crediting Period	2	10/10/2022
D03	Registered PDD for CP1	10	14/03/2011
D04	Validation Report	-	14/03/2011
D05	ER Calculation Excel spreadsheet	1	02/05/2022
D06	ACM0002: Grid-connected electricity generation from renewable sources	21.0	29/11/2019
D07	CDM Validation and Verification Standard version	3.0	09/09/2021
D08	CDM Project Standard	3.0	09/09/2021
D09	GS4GG V1.2 Standard	-	-
D10	National Emission factor of Turkey	-	06/10/2021
D11	Generation License	-	18/04/2007
D12	Connection Agreement of the Project activity	-	01/10/2010
D13	Ornithology Report of the Project activity	-	June 2017
D14	Alize-GS VER Projects_Annual Production&Averages	-	-
D15	SDG Impact Tool of the Project activity	1	02/05/2022
D16	Complimentary Stakeholder Consultation	-	13/04/2022
D17	Meter Documents: new main meter first index, old meter first index, spare meter change, test reports,		07/06/2017, 10/11/2017, 22/04/2011, 15/01/2015, 06/10/2017
D18	First Verification Report for the 1st Crediting Period of the Project activity	1.1	27/09/2012

Document Number	Document Name	Version	Date (dd/mm/yyyy)
D19	Monitoring Report for the First Verification of 1st Crediting Period of the Project activity	1.1	06.09.2012
D20	PIF	-	
D21	Wastewater receipts	-	2020-2021
D22	Social Security Records of PP Site Staff	-	2019-2022
D23	HSE training Records	-	2019-2021
D24	Issuance Review for the First Verification of 1st Crediting Period of the Project activity	-	16/10/2012
D25	PDD for the 2nd Crediting Period	3	05/01/2023
D26	ER Calculation Excel spreadsheet	2	05/01/2023
D27	SDG Impact Tool of the Project activity	2	05/01/2023
D28	Deviation Request Form	-	21/12/2022
D29	PDD for the 2nd Crediting Period	4	24/03/2023
D30	ER Calculation Excel spreadsheet	3	24/03/2023
D31	SDG Impact Tool of the Project activity	3	24/03/2023
D32	PDD for the 2nd Crediting Period	5	08/05/2023
D33	Commissioning of T10 and T13 Acceptance Protocol of Ministry of Energy	-	08/02/2019
D34	Commissioning of T9,T11 and T12 Acceptance Protocol of Ministry of Energy	-	28/02/2019
D35	PDD for the 2nd Crediting Period	6	23/06/2023

7. 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 more than 100 GS and VCS projects as an ITR, Team Leader, Validator and Verifier. With re-carbon, Seda is a free-lance Team Leader and ITR.

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

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

7.1. Appointment Certificates

CERTIFICATE OF APPOINTMENT

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

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

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

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

Christian Johannes
(General Manager)

This Certificate of Appointment is given to

Mrs. Fikriye Seda Atabek

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

Gold Standard
Verified Carbon Standard

SECTORAL SCOPE	TECHNICAL AREA	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
SS 01: Energy industries	TA 1.1: Thermal energy generation															
	TA 1.2: Renewable	08.02.2022	08.02.2022			03.02.2022	08.02.2022	08.02.2022	03.02.2022	03.02.2022	03.02.2022	08.02.2022	08.02.2022	03.02.2022	03.02.2022	03.02.2022
SS 02: Energy distribution	TA 2.1: Energy distribution	08.02.2022	08.02.2022			03.02.2022	08.02.2022	08.02.2022	03.02.2022	03.02.2022	03.02.2022	18.07.2022	18.07.2022	18.07.2022	18.07.2022	18.07.2022
SS 03: Energy demand	TA 3.2: Energy demand	18.07.2022	18.07.2022			18.07.2022	18.07.2022	18.07.2022	18.07.2022	18.07.2022	18.07.2022	18.07.2022	18.07.2022	18.07.2022	18.07.2022	18.07.2022
SS 13: Waste handling and disposal	TA 13.2: Solid waste and wastewater															
	TA 13.3: Manure															
SS 15: Agriculture	TA 15.1: Agriculture															

GCC
ICR International Carbon Registry
BioCarbon Registry

SECTORAL SCOPE	TECHNICAL AREA	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
SS 01: Energy industries	TA 1.1: Thermal energy generation															
	TA 1.2: Renewable	07.07.2022	07.07.2022	30.07.2022	30.07.2022	30.07.2022										
SS 02: Energy distribution	TA 2.1: Energy distribution	07.07.2022	07.07.2022	30.07.2022	30.07.2022	30.07.2022										
SS 03: Energy demand	TA 3.2: Energy demand	30.07.2022	30.07.2022	07.07.2022	30.07.2022	07.07.2022										
SS 13: Waste handling and disposal	TA 13.2: Solid waste and wastewater															
	TA 13.3: Manure															
SS 15: Agriculture	TA 15.1: Agriculture															

COUNTRY EXPERTISE: Turkey, China

R-C-01 / 24.08.2022- 03

CERTIFICATE OF APPOINTMENT

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

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

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

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

Christian Johannes
(General Manager)

This Certificate of Appointment is given to

Mr. Anıl Söyler

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

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

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

COUNTRY EXPERTISE: Turkey, China

CERTIFICATE OF APPOINTMENT

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

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

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

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

Christian Johannes
(General Manager)

This Certificate of Appointment is given to

Ms. Öykü Yakupoğlu

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

Gold Standard

Verified Carbon Standard

SECTORAL SCOPE	TECHNICAL AREA	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
SS 01: Energy industries	TA 1.1: Thermal energy generation															
	TA 1.2: Renewables						30.06.2022	30.06.2022			30.06.2022	30.06.2022	30.06.2022			30.06.2022
SS 02: Energy distribution	TA 2.1: Energy distribution															
SS 03: Energy demand	TA 3.1: Energy demand															
SS 13: Waste handling and disposal	TA 13.1: Solid waste and wastewater															
	TA 13.2: Manure															
SS 15: Agriculture	TA 15.1: Agriculture															

ICR International Carbon Registry

BioCarbon Registry

SECTORAL SCOPE	TECHNICAL AREA	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT	VERIFIER	VALIDATOR	TEAM LEADER	ITR	EXPERT
SS 01: Energy industries	TA 1.1: Thermal energy generation															
	TA 1.2: Renewables	30.06.2022	30.06.2022			30.06.2022										
SS 02: Energy distribution	TA 2.1: Energy distribution															
SS 03: Energy demand	TA 3.1: Energy demand															
SS 13: Waste handling and disposal	TA 13.1: Solid waste and wastewater															
	TA 13.2: Manure															
SS 15: Agriculture	TA 15.1: Agriculture															

COUNTRY EXPERTISE:	Turkey

8. VALIDATION OPINION

Re Carbon Ltd. performed the 2nd crediting period validation of the "ÇATALTEPE 16 MW WIND FARM PROJECT, TURKEY" in "Turkey" between 02/05/2022 and 05/01/2023. The validation was performed on the basis of UNFCCC criteria for the CDM, Gold Standard for Global Goals (GS4GG) v1.2 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 as team leader, Öykü Yakupoğlu as Validator and Anıl Söyler as an ITR", and the project activity was checked against the applicable rules and regulations of CDM including CDM Validation and Verification Standard for project activities version 3.0, CDM Project Standard for project activities version 3.0 and GS4GG version 1.2 and other relevant GS4GG requirements.

Re Carbon Ltd. hereby confirms that the proposed project activity "Çataltepe 16 MW Wind Farm Project, Turkey" in Turkey, has applied all relevant EB-guidance as the selected baseline and monitoring methodologies and the associated methodological tools have been applied correctly. The total emission reductions from the project are estimated to be around 26,693 tCO_2e per annum over the 2nd crediting period (GS-VERs). The emission reduction forecast was checked and it is deemed likely that the stated amount will be 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 "Çataltepe 16 MW Wind Farm Project, Turkey" in Turkey, as described in the PDD (version 6 and 23/06/2023)

- meets all relevant Host Country criteria;
- meets all relevant requirements of the GS4GG, UNFCCC for CDM project activities [including 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 21.0
- is likely to achieve estimated emission reductions;

Therefore, Re Carbon Ltd. requests the renewal of crediting period of the project activity.

Mrs. Fikriye Seda ATABEK	Mr. Anıl SÖYLER	Ms. Esin TUNALI
Team Leader	ITR	Certification Manager
30/06/2023	30/06/2023	30/06/2023

ANNEX 1: VALIDATION PROTOCOL

Table 1 – GS-PDD-FORM, GS4GG and CDM Renewal of Crediting Period Validation Requirements

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
Cover Page-Key Project Information					
1. Has the following information been indicated in the cover page of the PDD?	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.1. GS ID of the project activity	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.2. Title of the project activity	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.3. Time of first submission date	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.4. Date of design certification	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
1.5. Version number of the PDD	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.6. Completion date of version	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.7. Project developer	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.8. Project representative	GS-PDD-FORM	DR	Yes, stated correctly.	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	Ver. 1.2				
1.9. Project developers and any communities involved	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.10. Host country (ies)	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.11. Activity requirements applied	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.12. Scale of the project activity	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.13. Other requirements applied	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.14. Methodology (ies) applied and version number	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.15. Product requirements applied	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
1.16. Project cycle	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
2. Has the estimated sustainable development contributions of the project activity been provided in the relevant tabular format?	GS-PDD-FORM Ver. 1.2	DR	a)Please delete sheets other than “Combined Margin EF” from excel b)PDD states “26,669” and excel states “26,693”, please revise	CAR-1	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
A. Description of Project					
A.1. Purpose and general description of project					
1. Is the scenario existing prior to the implementation of the project activity including, where applicable, the type of facility where the project activity will take place or replace, described in the PDD?	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
2. Is the baseline scenario described as identified in section B4 of the PDD? (If baseline scenario is the same with the scenario existing prior to the start of the project activity, then no need to repeat the description, but it shall be stated in the PDD that both scenarios are the same.)	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
3. Has the PDs provided an estimation of annual average and total GHG emission reductions for the chosen crediting period?	GS-PDD-FORM Ver. 1.2	DR	a-Please revise "The average value of Çataltepe WPP's electricity generation between 2010 and 2021. (12 years)." Because the data is based on "2012-2021". b-Please provide PDD that states "project is estimated to supply grid as 96,291 MWh and 61,122 tCO2-eq per annum and which total to reduction of 427,856 tCO2-eq over these first 7-year crediting period according to registered PDD." These numbers do not match with validation report.	CAR-2	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
			c-Please correct this sentence "The project's capacity was increased to 27.75 MW in 2019. But PP can use only 20.7 MW capacity's electricity generation."		
4. Is the purpose of the project activity described including how it contributes to the sustainable development of the Host Party?	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
A.1.1. Eligibility of the project under Gold Standard		**This section of the PDD is not reviewed as the project is under validation for renewal of crediting period.**			
A.1.2. Legal ownership of products generated by the project and legal rights to alter use of resources required to service the project					
A.1.2.1. Is it justified that the project owner has full and uncontested legal ownership of the products that are generated under Gold Standard Certification and has legal rights concerning changes in use of resources required to service the Project for e.g water rights, where applicable?	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
A.2. Location of the project activity		**This section of the PDD is not reviewed as the project is under validation for renewal of crediting period.**			

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
A.3. Technologies and/or measures		**This section of the PDD is not reviewed as the project is under validation for renewal of crediting period.**			
		DR	Yes, stated correctly.	OK	OK
A.4. Scale of the project					
A.4.1. Has the scale of the project defined (micro scale, small scale or others)?	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
A.4.2. Is the justification for the scale of the project provided referring to relevant activity requirement?	GS-PDD-FORM Ver. 1.2	DR	Yes, stated	OK	OK
A.5. Funding source of project		**This section of the PDD is not reviewed as the project is under validation for renewal of crediting period.**			
B. Application of Approved Gold Standard Methodology (ies) and/or Demonstration of SDG Contributions					
B.1. Reference of approved methodology(ies)					
B.1.1. Are the references including the number, title, and the version of the selected methodology(ies) given in the PDD?	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
B.1.2. Are the references including the number, title, and the version of any tools and other methodologies to which the selected methodology(ies) refers to given in the PDD?	GS-PDD-FORM Ver. 1.2 CDM project standard for project activities §54	DR	Yes, stated correctly.	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.2. Applicability of methodology(ies)					
B.2.1. Has the PDs justified the choice of the selected methodology(ies), if applicable, by showing that the project activity meets each applicability condition of the methodology(ies)?	GS-PDD-FORM Ver. 1.2 CDM project standard for project activities §54 CDM validation and verification standard for project activities §67	DR	Yes, stated correctly.	OK	OK
B.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?	CDM validation and verification standard for project activities §67	DR	Yes	OK	OK
B.2.3. Has the PDs explained the documentation that has been used and provided the references to applicability of methodology?	GS-PDD-FORM Ver. 1.2	DR	Yes, stated correctly.	OK	OK
ACM 0002					
B.2.4. Is the type of proposed project activity defined?	ACM 0002 Version 21.0	DR	Yes, stated correctly.	OK	OK
B.2.5. 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 21.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.2.5.1. 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 21.0	DR	N/A	OK	OK
B.2.5.2. Is the project activity implemented in an existing single 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?	ACM 0002 Version 21.0	DR	N/A	OK	OK
B.2.5.3. 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 21.0	DR	N/A	OK	OK
B.2.5.4. If the project activity is an integrated hydro power project, has the PDs 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 21.0	DR	N/A	OK	OK
B.2.5.5. If the project activity is an integrated hydro power project, has the PDs 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 21.0	DR	N/A	OK	OK
B.2.6. If the project activity is an integrated hydro power project involving multiple reservoirs,	ACM 0002 Version 21.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
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?					
B.2.6.1. The power density calculated using the total installed capacity of the integrated project, as per equation (4), is greater than 4 W/m2;	ACM 0002 Version 21.0	DR	N/A	OK	OK
B.2.6.2. Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity;	ACM 0002 Version 21.0	DR	N/A	OK	OK
B.2.6.3. Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m2 shall be:	ACM 0002 Version 21.0	DR	N/A	OK	OK
B.2.6.3.1. Lower than or equal to 15 MW; and	ACM 0002 Version 21.0	DR	N/A	OK	OK
B.2.6.3.2. Less than 10 per cent of the total installed capacity of integrated hydro power project.	ACM 0002 Version 21.0	DR	N/A	OK	OK
ACM 0001					
B.2.7. Does the project activity include one of the following conditions?	ACM 0001 Version 19.0	DR	N/A	OK	OK
B.2.7.1. 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	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
installed prior to the implementation of the project activity; or					
B.2.7.2. Make an investment into an existing LFG capture system to increase the recovery rate or change the use of the captured LFG, provided that:	ACM 0001 Version 19.0	DR	N/A	OK	OK
B.2.7.2.1. 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
B.2.7.2.2. 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
B.2.7.2.3. 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
B.2.7.2.4. Generating electricity;	ACM 0001 Version 19.0	DR	N/A	OK	OK
B.2.7.2.5. 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
B.2.7.2.6. Supplying the LFG to consumers through a natural gas distribution network;	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
B.2.7.2.7. Supplying compressed/liquefied LFG to consumers using trucks;	ACM 0001 Version 19.0	DR	N/A	OK	OK
B.2.7.2.8. Supplying the LFG to consumers through a dedicated pipeline;	ACM 0001 Version 19.0	DR	N/A	OK	OK
B.2.7.3. Do not reduce the amount of organic waste that would be recycled in the absence of the project activity.	ACM 0001 Version 19.0	DR	N/A	OK	OK
ACM 0022					
B.2.8. Does the project activity include the fresh waste, originally intended for disposal in a solid waste disposal site (SWDS), and treated using any (combination) of the waste treatment options listed in Table 2 of the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.2.9. Does the project activity avoid emissions of methane associated with disposing organic waste in a SWDS with or without a partial landfill gas (LFG) capture system?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.2.10. Does the project activity cover applicability conditions that apply for each specific treatment option as defined in the Table-2 of the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.2.11. Does the project cover the following conditions?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.2.11.1. The construction of a new plant to implement one or several of the alternative waste treatment options provided in Table 2 of the methodology	ACM 0022 Version 2.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.2.11.2. Except for the case of composting, co-composting and anaerobic digestion, only wastes for which emission reductions are claimed (fresh waste or wastewater) are processed.	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.2.11.3. Neither organic fresh waste nor products and by-products from the waste treatment plant established under the project activity are stored on-site under anaerobic conditions.	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.2.11.4. Any run-off wastewater is treated within the project boundary	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.2.11.5. The project does not reduce the amount of waste that would be recycled in the absence of the project activity	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.2.11.6. In the case that applicable laws or regulations require the use of the waste treatment option(s) implemented under the project activity, the compliance rate of such laws and regulations should be below 50 per cent in the period for which issuance of VERs is requested in order to claim emission reductions for that period.	ACM 0022 Version 2.0	DR	N/A	OK	OK
AM0058					
B.2.12. Is this a project activity that introduce a primary district heating system to supply	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
heat to residential and commercial consumers?					
B.2.13. 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
B.2.13.1. 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
B.2.13.2. A new centralised heat only boiler(s); or	AM0058 Version 5.0	DR	N/A	OK	OK
B.2.13.3. A combination of both B.2.13.1 and B.2.13.2	AM0058 Version 5.0	DR	N/A	OK	OK
B.2.14. Does the project activity include any of below components?	AM0058 Version 5.0	DR	N/A	OK	OK
B.2.14.1. Heat supplied to the district heating system is predominantly 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;	AM0058 Version 5.0	DR	N/A	OK	OK
B.2.14.2. 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

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.2.14.3. The power plant is fossil fuel fired;	AM0058 Version 5.0	DR	N/A	OK	OK
B.2.14.4. 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
B.2.14.5. 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
B.2.14.6. 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 50% of heat comes from the power plant within the primary district heating system;	AM0058 Version 5.0	DR	N/A	OK	OK
B.2.14.7. 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.					

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.2.15. 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
B.2.15.1. Electricity to a national or a regional grid, or	AMS I.D. Version 18.0 §2 §4 §7	DR	N/A	OK	OK
B.2.15.2. Electricity to an identified consumer facility via national/regional grid through a contractual arrangement such as wheeling?	AMS I.D. Version 21.0 §2 §4 §7	DR	N/A	OK	OK
B.2.15.3. 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
B.2.16. Does the new unit co-fires fossil fuel?	AMS I.D. Version 18.0 §7	DR	N/A	OK	OK
B.2.17. 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
B.2.18. Is the project activity a retrofit, rehabilitation or a replacement?	AMS I.D. Version 18.0 §9	DR	N/A	OK	OK
B.2.19. If the proposed project activity is a hydro power plant project, does one of the	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
following conditions conform to the proposed project activity?	§5				
B.2.20. 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
B.2.21. 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
B.2.22. 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
AMS-II.G					
B.2.23. Does the proposed project activity comprises efficiency improvements in thermal applications of non-renewable biomass. Examples of applicable technologies and measures include the introduction of high efficiency biomass fired project devices (cookstoves or ovens or dryers) to replace the existing devices and/or energy efficiency improvements in existing biomass fired cookstoves or ovens or dryers? (AMS II.G. is not applicable to Greenfield applications)	AMS II.G. Version 12.0 §2	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.2.24. Does the project involves cookstoves, if so is the introduction of single pot or multi pot portable or in-situ cookstoves with rated efficiency of at least 20 per cent?	AMS II.G. Version 12.0 §3	DR	N/A	OK	OK
B.2.25. Is the certificate issued by third party or test results for the cookstove efficiency submitted?	AMS II.G. Version 12.0 §3	DR	N/A	OK	OK
B.2.26. The aggregate energy savings of a single project activity shall not exceed the equivalent of 60 GWh per year or 180 GWh thermal per year in fuel input.	AMS II.G. Version 12.0 §4	DR	N/A	OK	OK
B.2.27. Has non-renewable biomass been used in the project region since 31 December 1989, established using survey methods or referring to published literature, official reports or statistics?	AMS II.G. Version 12.0 §5	DR	N/A	OK	OK
B.2.28. For cases where the biomass is sourced from renewable sources, the project participants should use a corresponding Type I methodology.	AMS II.G. Version 12.0 §6	DR	N/A	OK	OK
B.2.29. Does the PDD explain the proposed method for distribution of project devices including the method to avoid double counting of emission reductions such as unique identifications of product and end-user locations (e.g. programme logo)?	AMS II.G. Version 12.0 §7	DR	N/A	OK	OK
B.2.30. Does the PDD also explain how the proposed procedures prevent double counting of emission reductions, for example to avoid that project stove manufacturers, wholesale providers or	AMS II.G. Version 12.0 §8	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
others claim credit for emission reductions from the project devices?					
The Gold Standard Methodology for Emission Reductions from Safe Drinking Water Supply (SDWS)					
B.2.31. Does the project activity introduce a new, or rehabilitate an existing, zero-emission or low-emission technology to supply safe drinking water?	SDWS Version 1.0 §2.1.1	DR	N/A	OK	OK
B.2.32. Eligible household water treatment technologies (HWT), institutional water treatment technologies (IWT), and community level water treatment technologies (CWT) include bleach/chlorine, water filter (ceramic, sand, composite, membrane, etc.), UV disinfection, etc.	SDWS Version 1.0 §2.2.1a	DR	N/A	OK	OK
B.2.33. Eligible community water supply technologies (CWS) include new installation of new borehole hand-pumps, borehole hand-pumps rehabilitation, solar powered drinking water pumps, etc. Water pumps powered by fossil-fuel engines are not eligible, with the exception of backup fossil–fuel engines that are used for no more than 10% of operating hours (parameter SWDS 33).	SDWS Version 1.0 §2.2.1b	DR	N/A	OK	OK
B.2.34. All projects involving CWT and CWS technologies must also include ongoing maintenance and repair of the project technology	SDWS Version 1.0 §2.2.1c	DR	N/A	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.2.35. Where the project involves the rehabilitation of an existing technology, the project developer shall provide evidence that the existing technology is non-operational and that there is no planned maintenance or repair for at least 3 months after the date it became non-operational (parameter SWDS 2).	SDWS Version 1.0 §2.2.1d	DR	N/A	OK	OK
B.2.36. This methodology allows for project activities to include safe water treatment and/or supply technologies implemented for end-users in households, and/or commercial premises such as shops or institutional premises including half or full day/boarding schools, prisons, army camps & refugee camps.	SDWS Version 1.0 §2.2.1e	DR	N/A	OK	OK
B.2.37. In cases where the safe water is retrieved at the CWT or CWS location, the water in its improved form shall be available within a distance of 1 km or less from the end-users, as demonstrated by satellite imaging or GPS coordinates of each CWT or CWS location. Alternatively, as a proxy, a total collection time of 30 minutes or less for a round trip, including queuing, using the travel modes of walking or pedaling may be demonstrated (parameter SDWS 1).	SDWS Version 1.0 §2.2.1f	DR	N/A	OK	OK
B.2.38. Project technology performance level (HWT and IWT): It shall be demonstrated based on report of laboratory testing or official notification that the project technology or equipment achieves either (i) the performance target classification 3-star or	SDWS Version 1.0 §2.2.1g	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
2-star level, meaning "Comprehensive Protection," as per the WHO International Scheme to Evaluate Household Water Treatment Technologies (World Health Organization, 2011) or (ii) compliance with the national standard or guideline for household drinking water treatment technology; if no national guideline or standard is available, then the project technology shall comply with the WHO International Scheme requirements as per (i) (parameter SDWS 2).					
B.2.39. Project technology performance level (CWT and CWS): For each individual CWT or CWS, it shall be demonstrated at the start of each crediting period with water quality testing reports that the water directly supplied by the project water technology/source achieves both: i. microbial quality in line with either (i) national standards or guidelines for microbial quality of drinking water, or in the absence of such requirements, (ii) the guideline values for verification of microbial quality from the Guidelines for drinking-water quality (Table 7.10, WHO, 2017) 10; and ii. compliance with (i) national standards or guidelines on priority chemical contamination and physical and aesthetic aspects, or in the absence of such requirements, (ii) international standards or guidelines on priority chemical	SDWS Version 1.0 §2.2.1h	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
contamination and physical and aesthetic aspects. (parameter SWDS 3)					
B.2.40. The project must conduct annual water hygiene education campaigns for the end-users. (parameter SDWS 20).	SDWS Version 1.0 §2.2.1i	DR	N/A	OK	OK
B.2.41. A project applying this methodology may make SDG claims if relevant monitoring parameter(s) is included in the monitoring plan to demonstrate and confirm the project's contributions to SDGs. See parameter SDWS 19	SDWS Version 1.0 §2.2.1j	DR	N/A	OK	OK
B.2.42. Project shall document the national, regional and local regulatory framework for provision of safe drinking water in the project boundary (parameter SDWS 4). The project shall not undermine or conflict with any national, sub-national and local regulations or guidance for safe drinking water supply, operation and maintenance, including any tariff requirements.	SDWS Version 1.0 §2.3.1	DR	N/A	OK	OK
B.2.43. If the expected technical life of project technology (parameter SDWS 7) is shorter than the crediting period, describe measures to ensure that end users are provided replacement systems of comparable quality at the end of the expected technical life (for example, replace with comparable or better technology, retrofit with performance guarantee, etc.). This applies both for new technology and rehabilitated.	SDWS Version 1.0 §2.3.2	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.2.44. All CWT and CWS projects must include ongoing maintenance and repair of the project technology. The PDD must describe the maintenance and repair plan, including the system for logging/documenting of technology operation and maintenance events including periods of downtime. The log of operation and maintenance shall be required during the monitoring period to demonstrate project technology operation	SDWS Version 1.0 §2.3.3	DR	N/A	OK	OK
The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste					
B.2.45. Does the proposed project activity involve the following?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.2.45.1. Manure management on one or multiple livestock farms where the existing anaerobic manure treatment system, within the project boundary, is replaced by one or a combination of more than one animal waste management systems (AWMSs) that result in less GHG emissions compared to the existing system	MMS & MSW version 1.0	DR	N/A	OK	OK
B.2.46. Does the proposed project activity involve manure management project under the following conditions?	MMS & MSW version 1.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.2.46.1. Farms where livestock populations, comprising of cattle, buffalo, swine, sheep, goats, and/or poultry, is managed under confined conditions;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.2.46.2. Farms where manure is not discharged into natural water resources (e.g. rivers or estuaries);	MMS & MSW version 1.0	DR	N/A	OK	OK
B.2.46.3. In case of anaerobic lagoons treatments systems, the depth of the lagoons used for manure management under the baseline scenario should be at least 1 meter;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.2.46.4. The annual average ambient temperature at the site where the anaerobic manure treatment facility in the baseline existed is higher than 5°C;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.2.46.5. In the baseline case, the minimum retention time of manure waste in the anaerobic treatment system is greater than 1 month;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.2.46.6. The AWMS(s) in the project case results in no leakage of manure waste into ground water, e.g. the lagoon should have a non-permeable layer at the lagoon bottom;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.2.46.7. If residues are stored in between collection activities, storage tanks shall comprise outdoor open equipments;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.2.46.8. If the manure/ treated residue is used as fertilizer in the baseline, project proponents must ensure that this end	MMS & MSW version 1.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
use remains the same throughout the project activity;					
B.2.46.9. In case residual waste from the digestion is handled aerobically and/or submitted to soil application, the proper conditions and procedures (not resulting in methane emissions) for storage and transportation and soil application must be ensured.	MMS & MSW version 1.0	DR	N/A	OK	OK
B.2.46.10. In case of co-digestion, for one or more sources of substrates, it cannot be demonstrated that the organic matter would otherwise have been left to decay anaerobically, baseline emissions related to such organic matter shall be accounted for as zero, whereas project emissions shall be calculated according to the procedures presented in this methodology for all co-digested substrates;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.2.46.11. Has the legally binding declaration been provided by the other parties involved that they will not claim VERs from the improved animal waste treatment practices other than the Central Treatment Plant managing person/entity?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.2.46.12. If the project activity involves co-digestion of MSW, have the applicability conditions referred in the Table-2 of the latest applicable version of ACM0022 been met?	MMS & MSW version 1.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.3. Project boundary					
B.3.1. Has the PD 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?	GS-PDD-FORM Ver. 1.2	DR	Yes, given correctly	OK	OK
B.3.2. Has the PD presented a flow diagram of the project boundary, physically delineating the project activity, based on the description provided in section A.3 of the PDD?	GS-PDD-FORM Ver. 1.2	DR	Yes, given correctly	OK	OK
B.3.3. Has the PD included in the flow diagram the equipment, systems and flows of mass and energy described in section A.3 of the PDD, and indicated in the diagram the emission sources and GHGs included in the project boundary and the data and parameters to be monitored?	GS-PDD-FORM Ver. 1.2	DR	Yes, given correctly	OK	OK
B.3.4. Does the selected methodology allow the PDs to choose whether a source or gas is to be included in the project boundary?	CDM project standard for project activities §58	DR	Yes	OK	OK
B.3.5. If the selected methodology allows the project developers to choose whether a source or gas is to be included in the project boundary, do the project developers explain and justify their choices?	CDM project standard for project activities §58	DR	Yes	OK	OK
B.3.6. Have all sources and GHGs necessary for the calculation of emissions been included within the project boundary?	CDM validation and verification standard for project activities §69	DR	Yes	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.3.7. Does the PDD correctly describe the project boundary and the physical delineation of the proposed project activity?	CDM project standard for project activities §57	DR	Yes	OK	OK
B.3.8. Has the selected methodology been correctly applied with respect to project boundary?	CDM validation and verification standard for project activities §63a	DR	Yes	OK	OK
ACM 0002					
B.3.9. Is the spatial extent of the project boundary identified correctly?	ACM 0002 Version 21.0	DR	Yes	OK	OK
B.3.10. 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 21.0	DR	Yes	OK	OK
ACM 0001					
B.3.11. Does the project boundary include the following as applicable?	ACM 0001 Version 19.0	DR	N/A	OK	OK
B.3.11.1. Sites where the LFG is flared or used (e.g. flare, power plant, boiler, air heater, glass melting furnace, kiln, natural gas distribution network,	ACM 0001 Version 19.0	DR	N/A	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
dedicated pipeline or biogas processing facility);					
B.3.11.2. 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
B.3.11.3. 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
B.3.11.4. 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
B.3.11.5. The transportation of the compressed/liquefied LFG from the biogas processing facility to consumers.	ACM 0001 Version 19.0	DR	N/A	OK	OK
ACM 0022					
B.3.12. Does the spatial extent of the project been defined as the following?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.3.12.1. SWDS where the waste is disposed of in the baseline, anaerobic lagoons or sludge pits treating organic wastewater in the baseline, and the site of the alternative waste treatment process(es)	ACM 0022 Version 2.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.3.12.2. On-site electricity and/or heat generation and use, on-site fuel use and the wastewater treatment plant used to treat the wastewater by-products of the alternative waste treatment process(es).	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.3.13. If the project provides electricity to a grid, does the spatial extent of the project boundary include those plants connected to the energy system to which the plant is connected?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.3.14. If the upgraded biogas is fed to a natural gas distribution system within the context of the project activity, does the natural gas distribution system been included in the boundary?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.3.15. Has emission sources been included in or excluded from the project boundary as listed in Table 3 of the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
AM0058					
B.3.16. Does the physical delineation of the project boundary include the following?	AM0058 Version 5.0	DR	N/A	OK	OK
B.3.16.1. 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 from changes in power generation and consumption due to the project activity;	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
B.3.16.2. The heat-only boilers that supply heat to the district heating system;	AM0058 Version 5.0	DR	N/A	OK	OK
B.3.16.3. 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
B.3.17. Has it been illustrated by PD 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
B.3.18. Are the emissions sources included in or excluded from the project boundary indicated in the PDD in line with the Table-2 of the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
AMS-II.G					
B.3.19. The project boundary is the physical, geographical site of the efficient devices that utilize biomass	AMS II.G. Version 12.0 §15	DR	N/A	OK	OK
The Gold Standard Methodology for Emission Reductions from Safe Drinking Water Supply					
B.3.20. The project boundary includes: a. the physical, geographical sites of the low- or zero-greenhouse gas emitting technologies to treat/supply safe drinking water installed by the project activity, b. any back-up engines or other equipment using fossil-fuel related to the low greenhouse gas emitting technologies,	SDWS. Version 1.0 §3.1.1	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
c. the electricity grid, in the case electricity is used by the project, and d. the household, commercial and institutional buildings where the end users of safe water provided by the project are located					
AMS-I.D.					
B.3.21. Is the spatial extent of the project boundary identified correctly?	AMS I.D. Version 21.0 §18	DR	N/A	OK	OK
The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste					
B.3.22. Does the spatial extent of the project boundary include the following as applicable?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.22.1. The site of the AWMS(s)) and /or solid waste disposal site (if applicable),	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.22.2. Treatment facility and/ or central treatment facility including the storage tanks (if applicable)	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.22.3. The site where the residual waste from biological treatment or products from those treatments, like slurry, are handled, disposed, submitted to soil application, or treated thermally/mechanically	MMS & MSW version 1.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.3.22.4. Onsite flare or energy and/or heat generation equipment and the power/heat source	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.22.5. The road itineraries and/or piping system between the manure collection points	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.22.6. Waste/ residue transportation (if applicable),	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.22.7. The central treatment plant and sold waste disposal site (if applicable)	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.23. Are the emissions sources included in or excluded from the project boundary indicated in the PDD in line with the Table-2 of the methodology?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.24. Has the clear diagrammatic representation of the project scenario been provided by PD showing the following?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.24.1. All the manure waste treatments steps as well as its final disposal	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.24.2. The final use of methane, if any is captured, and also the auxiliary energy used to run project treatments steps	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.24.3. The fraction of volatile solids degraded within the project boundary in the pre-project situation before disposal.	MMS & MSW version 1.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.3.25. Has the precise location of the farm(s) been identified by PD including the following?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.25.1. Co-ordinates of farm(s) using global positioning system	MMS & MSW version 1.0	DR	N/A	OK	OK
B.3.25.2. The road distances of the itineraries between them and the manure central treatment plant using information from official sources	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4. Establishment and description of the baseline scenario					
B.4.1. Does the approved methodology that is selected by the proposed GS project prescribe the baseline scenario and hence no further analysis is required? •	CDM validation and verification standard for project activities §94 CDM project standard for project activities §59	DR	Yes, described	OK	OK
B.4.2. Does the PDD identify the baseline for the proposed GS project, defined as the scenario that reasonably represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the proposed GS project?	CDM validation and verification standard for project activities §75 CDM project standard for project activities §61	DR	Yes, described	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.4.3. If the methodology requires use of the tools to identify the baseline scenario, have all those been applied?	CDM validation and verification standard for project activities §77	DR	Yes	OK	OK
B.4.4. Are there relevant national and/or sectoral policies to identify the baseline scenario?	CDM validation and verification standard for project activities §81 CDM project standard for project activities §64	DR	No	OK	OK
B.4.5. If there are relevant national and/or sectoral policies to identify the baseline scenario, have those been considered correctly in the PDD?	CDM validation and verification standard for project activities §83d	DR	N/A	OK	OK
B.4.6. Are there relevant circumstances to identify the baseline scenario?	CDM validation and verification standard for project activities §81	DR	N/A	OK	OK
B.4.7. Does the methodology require several alternative scenarios to be considered in the identification of the most reasonable baseline scenario?	CDM validation and verification standard for project activities §78	DR	N/A	OK	OK
B.4.8. If the methodology requires several alternative scenarios to be considered in the identification of the most reasonable	CDM validation and verification standard for	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
baseline scenario, are all credible scenarios that are in the PDD and are supplementary to those required by the methodology reasonable in the context of the proposed GS project?	project activities §78				
B.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?	CDM TOOL01 Tool for the demonstration and assessment of additionality	DR	N/A	OK	OK
B.4.10. If the alternative scenarios for each of them be identified separately, are the realistic combinations of these be considered as possible alternative scenarios to the proposed project activity?	CDM TOOL01 Tool for the demonstration and assessment of additionality	DR	N/A	OK	OK
B.4.11. Does the list of alternative scenarios given in the PDD include the following?	CDM validation and verification standard for project activities §93	DR	N/A	OK	OK
B.4.11.1. The project activity is undertaken without being registered as a GS project	CDM validation and verification standard for project activities §93a	DR	N/A	OK	OK
B.4.11.2. All plausible alternatives	CDM validation and verification standard for project activities §93b	DR	N/A	OK	OK
B.4.11.3. Comply with all applicable and enforced legislation	CDM validation and verification standard for	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	project activities §93c				
B.4.12. Has the PD explained how the baseline scenario is established in accordance with the selected methodology(ies)?	GS-PDD-FORM Ver. 1.2 CDM Project Standard for Project activities §59	DR	N/A	OK	OK
B.4.13. Where the procedure in the selected methodology(ies) involves several steps, has the PDs described how each step is applied and transparently documented the outcome of each step?	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.4.14. Has the PD provided and explained all data used to establish the baseline scenario (variables, parameters, data sources, etc.)?	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.4.15. Is the identified baseline scenario reasonably supported by correct and verifiable references, assumptions, calculations and ratinonales?	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.4.16. Has a transparent description of the baseline scenario been provided including the technology(ies) that would be employed and/or the activities that would take place in the absence of the project activity?	GS-PDD-FORM Ver. 1.2 CDM validation and verification standard for project activities §80	DR	N/A	OK	OK
B.4.17. Has the selected methodology been correctly applied with respect to baseline identification?	CDM validation and verification standard for	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	project activities §63b				
ACM 0002					
B.4.18. 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 21.0	DR	Yes	OK	OK
B.4.19. If the project activity involves capacity addition to existing grid-connected renewable power plant/unit, is the baseline scenario identified appropriately in accordance with the ACM0002?	ACM 0002 Version 21.0	DR	N/A	OK	OK
B.4.20. 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 21.0	DR	N/A	OK	OK
B.4.21. 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	ACM 0002 Version 21.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
likely be replaced or retrofitted ($DATE_{Baseline\ Retrofit}$) defined?					
B.4.22. 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 21.0	DR	N/A	OK	OK
B.4.23. Are the realistic and credible alternative baseline scenarios for power generation appropriately identified following the Step 1 of the "Combined tool to identify the baseline scenario and demonstrate additionality"?	ACM 0002 Version 21.0	DR	N/A	OK	OK
B.4.24. Is "the proposed project activity undertaken without being registered as a CDM project activity" listed as one of the alternatives?	CDM TOOL01 Tool for the demonstration and assessment of additionality CDM validation and verification standard for project activities §93a ACM 0002 Version 21.0	DR	N/A	OK	OK
B.4.25. 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?	CDM TOOL01 Tool for the demonstration and assessment of additionality CDM validation and verification standard for project activities §93b	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	ACM 0002 Version 21.0				
B.4.26. Has "continuation of the current situation (no project activity or other alternatives undertaken" been listed as an alternative?	CDM TOOL01 Tool for the demonstration and assessment of additionality ACM 0002 Version 21.0	DR	N/A	OK	OK
B.4.27. 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 21.0	DR	N/A	OK	OK
B.4.28. 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 21.0	DR	N/A	OK	OK
B.4.29. 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 21.0	DR	N/A	OK	OK
ACM 0001					
B.4.30. Has the the most plausible baseline scenario been determined according to the simplified procedures or the procedures	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
c) according to the latest applicable version of the "Combined tool to identify the baseline scenario and demonstrate additionality"?					
ACM 0022					
B.4.31. Have the one of the following two approaches been applied to select the most plausible baseline scenario as approprite?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.4.31.1. Approach 1 refers to the "Combined tool to identify the baseline scenario and demonstrate additionality"	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.4.31.2. Approach 2 relies on a set of objective criteria which are applied individually or in combination	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.4.31.3. In case of Approach 1, has it been applied according to the "Combined tool to identify the baseline scenario and demonstrate additionality" in line with the relevant requirements in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.4.32. In case of Approach 2 to identify the baseline scenario and demonstrate additionality, has it been applied in line with all relevant requirements in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.4.33. In case of Approach 2, has the collection coverage of MSW been estimated in line with the following?	ACM 0022 Version 2.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.4.33.1. The quantity of waste collected divided by the total waste generation, or	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.4.33.2. The population covered by waste collection service divided by the total population	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.4.34. In case of Approach 2, has the the quantity of waste collected been obtained from one of the following?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.4.34.1. Municipal waste authority or	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.4.34.2. Based on local statistics or	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.4.34.3. Based on the MSW accepted by all waste processing facilities, including open dump sites	ACM 0022 Version 2.0	DR	N/A	OK	OK
AM0058					
B.4.35. 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.					
B.4.36. If the project activity is greenfield 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?	AMS I.D. Version 18.0 §19	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.4.37. 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
B.4.38. Have the PDs 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
B.4.39. 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
B.4.40. Have the PDs 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-II.G					
B.4.41. Is the baseline scenario the projected use of fossil fuels to meet similar thermal energy needs as those provided by the project devices?	AMS II.G. Version 12.0 §23	DR	N/A	OK	OK
The Gold Standard Methodology for Emission Reductions from Safe Drinking Water Supply					

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.4.42. For users that boil unsafe water for drinking in the pre-project scenario, the general baseline scenario is that users would have boiled water for drinking in the absence of the project activity	SDWS. Version 1.0 §3.4.1	DR	N/A	OK	OK
B.4.43. For household end-users currently drinking unsafe water, the principles of suppressed demand are applied, such that the general baseline scenario is assumed to be that users would have boiled water for drinking in the absence of the project activity. The suppressed demand baseline does not apply to a large-scale project. A large-scale project can only account the users that boil water in the pre-project scenario. The suppressed demand baseline may be applied for institutional end-users, except where the institution is connected to a public distribution network (PDN) that supplies safe drinking water – unless justified that supplied water quality doesn't meet safe water definition (parameter SDWS 12).	SDWS. Version 1.0 §3.4.2	DR	N/A	OK	OK
B.4.44. For the case of end-users currently drinking unsafe water because e.g. energy poverty barriers result in less than the minimum required amount of safe drinking water, the principles of suppressed demand are applied and the baseline is set as a proxy technology (water boiling of an adequate quantity of drinking water) based on the standard of living achieved by peers (adequate supply of safe drinking water). Projects applying the suppressed demand	SDWS. Version 1.0 §3.4.3	DR	N/A	OK	OK

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baseline shall take into account any general rules or guidelines for suppressed demand published by the Gold Standard at the time of registration and crediting period renewal, as applicable					
B.4.45. Each Project or VPA shall determine the applicable baseline scenario for fuel, technology and end-user group as applicable. Refer to TPDDTEC for guidelines on baseline scenario selection and justification. Each project or VPA shall document the following pre-project conditions that define the specific baseline scenario of the end-user group(s) of the project or VPA: **Pre-project practices of boiling water or drinking unsafe water (suppressed demand):** Document the drinking water sources and/or treatment technologies available and used in the project boundary. **Efficiency of water boiling systems:** Document the baseline stove or water boiling technologies and technologies' thermal efficiency used in the project boundary. **Baseline fuels:** Document the baseline cooking fuels used and/or fuels used for water boiling in the project boundary	SDWS. Version 1.0 §3.5.1	DR	N/A	OK	OK
The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste					

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.4.46. In case of project with managing the manure in the existing facilities, have the complete set of existing/possible manure management systems listed in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (Volume 4, Chapter 10, Table 10.17) been taken into consideration by PD?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.47. In case of project with managing the manure in the greenfield facilities, has the baseline scenario been determined as an uncovered anaerobic lagoon?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.48. If the baseline scenario has been determined as an uncovered anaerobic lagoon, have the several anaerobic lagoon design options for the particular manure stream that meet the relevant regulations and take into consideration local conditions (e.g. environmental legislation, ground water table, land requirement, temperature) been defined?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.49. If the baseline scenario has been determined as an uncovered anaerobic lagoon, do the design specifications include average depth and surface area of the anaerobic lagoon, residence time of the organic matter, as well as any other key parameters?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.50. In case of project with managing the manure for electricity generation, has the following	MMS & MSW version 1.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
baseline alternatives been considered by PD?					
B.4.50.1. Electricity generation from biogas, undertaken without being registered as GS project activity;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.50.2. Electricity generation in existing or new renewable based captive power plant(s);	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.50.3. Electricity generation in existing and/or new grid-connected power plant;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.50.4. Electricity generation in an off-grid fossil fuel fired captive power plant;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.50.5. Electricity generation in existing and/or new grid-connected power plant and fossil fuel fired captive power plant(s).	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.51. In case of project with managing the manure for heat generation, has the following baseline alternatives been considered by PD?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.51.1. Heat generation from biogas undertaken without being registered as GS project activity;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.51.2. Heat generation in existing or new fossil fuel fired cogeneration plant(s);	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.51.3. Heat generation in existing or new renewable based cogeneration plant(s);	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.51.4. Heat generation in existing or new on-site or off-site fossil fuel based boiler(s) or air heater(s);	MMS & MSW version 1.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.4.51.5. Heat generation in existing or new on-site or off-site renewable energy based boiler(s) or air heater(s);	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.51.6. Any other source, such as district heat; and	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.51.7. Other heat generation technologies (e.g. heat pumps or solar energy).	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.52. In case of project with the treatment of the fresh waste, has the following alternatives or combinations of these alternatives been considered by PD?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.53. The project activity without being registered as a GS project activity (i.e. any (combination) of the waste treatment options; Composting, Co-composting or anaerobic digestion);	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.54. Disposal of the fresh waste in a SWDS with a partial capture of the LFG and flaring of the captured LFG;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.55. Disposal of the fresh waste in a SWDS without a LFG capture system;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.55.1. Part of the fresh fraction of the solid waste is recycled and not disposed in the SWDS;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.55.2. Part of the fresh fraction of the solid waste is treated aerobically and not disposed in the SWDS;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.55.3. Part of the organic fraction of the solid waste is incinerated and not disposed in the SWDS;	MMS & MSW version 1.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.4.55.4. Part of the organic fraction of the solid waste is gasified and not disposed in the SWDS;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.55.5. Part of the organic fraction of the solid waste is treated in an anaerobic digester and not disposed in the SWDS;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.55.6. Part of the organic fraction of the solid waste is mechanically or thermally treated to produce RDF/SB and not disposed in the SWDS.	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.56. In case of project with the treatment of the fresh waste, has the baseline scenario been determined as the one of the following among the most plausible baseline scenario alternatives?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.57. Disposal of the fresh waste in a SWDS with a partial capture of the LFG and flaring of the captured LFG;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.4.58. Disposal of the fresh waste in a SWDS without a LFG capture system;	MMS & MSW version 1.0	DR	N/A	OK	OK
B.5. Demonstration of additionality		**This section of the PDD is not reviewed as the project is under validation for renewal of crediting period.**			
B.5.1. Prior consideration of CDM					

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
1. In case of projects undergoing design changes, has the request for design change approval is within one year design change start date?	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.5.2. Ongoing financial need					
B.5.2.1. Has a short narrative that demonstrates how the revenue from Gold Standard certification is material to the ongoing sustainability of the project been provided?	GS-PDD-FORM Ver. 1.2	DR	Please remove wording “expected” Please provide OFN information and excel	CAR-3	OK
B.6. Sustainable Development Goals (SDG) outcomes					
B.5.1. Has the PDs specified the relevant SDG target for each of three SDGs addressed by the project?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.1. Explanation of methodological choices/approaches for estimating the SDG outcome					
B.6.1.1. Has the PDs explained how the methods or methodological steps in the selected methodology(ies), for calculating baseline and project outcomes are applied?	GS-PDD-FORM Ver. 1.2	DR	Please remove jpeg in B.6.1 of PDD	CAR-4	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.1.1.1. Baseline	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.1.1.2. Project	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.1.1.3. Leakage	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.1.1.4. Net benefit	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.1.2. Has the PDs clearly stated which equations will be used in calculating net benefit?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.1.3. Has the PDs explained and justified all relevant methodological choices including the following?	GS-PDD-FORM Ver. 1.2 CDM Project Standard for Project activities §72	DR	Yes	OK	OK
B.6.1.3.1. Where the methodology(ies) include different scenarios or cases, indicate and justify which scenario or case applies to the project activity	GS-PDD-FORM Ver. 1.2 CDM Project Standard for Project activities §72	DR	Yes	OK	OK
B.6.1.3.2. Where the methodology(ies) provide different options to choose from , indicate and justify	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
which option is chosen for the project activity	CDM Project Standard for Project activities §72				
B.6.1.3.3. Where the methodology(ies) allow different default values, indicate and justify which of the default values have been chosen for the project activity.	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.2. Data and parameters fixed ex ante					
B.6.2.1. Have the PDs included a compilation of information on the data and parameters that are **not monitored** during the crediting period but are determined before the registration and remain fixed throughout the crediting period under section B.6.3 of the PDD?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.2.2. Are the data that are calculated with the equations provided in the selected methodology(ies) or default values specified in the methodology(ies) included in the compilation?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.2.3. Is the following information regarding the data and parameters specified correctly?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.2.3.1. Relevant SDG indicator	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.2.3.2. Data/parameter	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.2.3.3. Data/parameter unit	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.2.3.4. Description of the data/parameter	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.2.3.5. Source of data	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.2.3.6. Values applied to data/parameter	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.2.4. Where applied values have been measured, are the following included in the PDD?	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.6.2.4.1. The equipment used	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.6.2.4.2. The standards used	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.6.2.4.3. Responsible person/entity having undertaken the measurement	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.6.2.4.4. The date of measurement(s)	GS-PDD-FORM	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	Ver. 1.2				
B.6.2.4.5. The frequency of measurement(s)	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.6.2.4.6. The measurement results	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.6.2.5. Has the purpose of data been chosen as one of the following for each data/parameter?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.2.5.1. Calculation of baseline;	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.2.5.2. Calculation of project;	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.2.5.3. Calculation of leakage.	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.3. Ex ante estimation of SDG impact					
B.6.3.1. Do the steps taken and equations applied to calculate following comply with the requirements of the selected baseline and monitoring methodology including applicable tool(s)?	CDM Project Standard for Project activities §71 CDM validation and verification standard for	DR	Yes	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	project activities §110				
B.6.3.1.1. project outcome	CDM Project Standard for Project activities §71 CDM validation and verification standard for project activities §110	DR	Yes	OK	OK
B.6.3.1.2. baseline outcome	CDM Project Standard for Project activities §71 CDM validation and verification standard for project activities §110	DR	Yes	OK	OK
B.6.3.1.3. leakage	CDM Project Standard for Project activities §71 CDM validation and verification standard for project activities §110	DR	Yes	OK	OK
B.6.3.1.4. Net outcomes	CDM Project Standard for Project activities §71 CDM validation and verification standard for project activities §110	DR	Yes	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.3.2. Where the methodology allows for selection between options for equations or parameters, has adequate justification been provided in the PDD?	CDM validation and verification standard for project activities §111	DR	Yes	OK	OK
B.6.3.3. Has the PDs used the values contained in the tables in section B.6.2 of the PDD for data and parameters available before registration?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.3.4. Has the PDs used the estimates contained in the table in section B.6 of the PDD for the data/parameters not available before registration and monitored during the crediting period?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.6.3.5. If any of these estimates has been determined by a sampling approach, has the PD provided a description of the sampling efforts undertaken in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities"?	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.6.3.6. Has the PDs provided a sample calculation for each equation used?	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.6.3.7. Have the PDs provided a sample calculation for each equation used, substituting the values used in the equations?	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
B.6.3.8. Is it explained and clearly stated how the procedures in the approved methodology or standardized baseline(s) to calculate emissions like	CDM validation and verification standard for project activities §112	DR	Yes	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
project emissions, baseline emissions and leakages are applied by the PDs?					
B.6.3.9. Has the selected methodology or standardized baseline(s) been correctly and transparently applied with respect to algorithms and/or formulae used to determine emission reductions?	CDM validation and verification standard for project activities §63c	DR	Yes	OK	OK
AMS I.D.					
B.6.3.10. Are baseline emissions calculated using equation (1) given in the methodology?	AMS I.D. Version 18.0 §22	DR	N/A	OK	OK
B.6.3.11. Is the emission factor calculated using one of the following options:	AMS I.D. Version 18.0 §23	DR	N/A	OK	OK
B.6.3.11.1. 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
B.6.3.11.2. 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
B.6.3.12. 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
B.6.3.13. 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

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.3.14. In case of capacity addition in wind, solar, wave or tidal power plants, are the baseline emissions calculated using equation (3) given in the methodology?	AMS I.D. Version 18.0 §27	DR	N/A	OK	OK
B.6.3.15. 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
B.6.3.16. 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
B.6.3.17. 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
B.6.3.18. 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
B.6.3.19. In case of retrofit, rehabilitation or replacement, have the PDs 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
B.6.3.19.1. The three last calendar years (five calendar years for hydro project)	AMS I.D. Version 18.0 §35	DR	N/A	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
prior to the implementation of the project activity					
B.6.3.19.2. 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
B.6.3.19.3. The commercial commissioning of the plant/unit;	AMS I.D. Version 18.0 §35	DR	N/A	OK	OK
B.6.3.19.4. If applicable: the last capacity addition to the plant/unit; or	AMS I.D. Version 18.0 §35	DR	N/A	OK	OK
B.6.3.19.5. If applicable: the last retrofit of the plant/unit	AMS I.D. Version 18.0 §35	DR	N/A	OK	OK
B.6.3.20. In case of retrofit, rehabilitation or replacement, have PDs 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 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.	AMS I.D. Version 18.0 §37 §38	DR	N/A	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.3.21. Where the project emissions are taken as "0" have the PDs made proper justification?	AMS I.D. Version 18.0 §39	DR	N/A	OK	OK
B.6.3.22. 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
B.6.3.23. If necessary, have the PDs 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
B.6.3.24. 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
B.6.3.25. 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
B.6.3.26. Are the emission reductions calculated using equation (9) given in the methodology?	AMS I.D. Version 18.0 §43	DR	N/A	OK	OK
ACM 0002					

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.3.27. Are baseline emissions calculated using equation (11) given in the methodology?	ACM 0002 Version 21.0	DR	Yes	OK	OK
B.6.3.28. Is the quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y ($EG_{PJ,y}$) calculated using equations (12), (13), (14), (15) or (16) given in the methodology depending on the project type and relevant requirements? ➢	ACM 0002 Version 21.0	DR	Yes	OK	OK
B.6.3.29. When the methodology offers options for approaches in calculations, is it documented in the PDD which option is applied?	ACM 0002 Version 21.0	DR	Yes	OK	OK
B.6.3.30. 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 21.0	DR	N/A	OK	OK
B.6.3.31. In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects)	ACM 0002 Version 21.0	DR	N/A	OK	OK
B.6.3.31.1. Is it ensured that the existing plant started commercial operation prior to the start of a minimum historical reference period of five	ACM 0002 Version 21.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
years, used for the calculation of baseline emissions?					
B.6.3.31.2. 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 21.0	DR	N/A	OK	OK
B.6.3.32. 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 21.0	DR	Yes	OK	OK
B.6.3.33. Where project emissions are taken as "0", has the PD made proper justification?	ACM 0002 Version 21.0	DR	Yes	OK	OK
B.6.3.34. Are the emission reductions calculated using equation (17) given in the methodology?	ACM 0002 Version 21.0	DR	Yes	OK	OK
ACM 0001					
B.6.3.35. 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
B.6.3.36. Are the project emissions calculated using relevant equations from equation	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
(22) to equation (25) in the methodology?					
B.6.3.37. Are the emission reductions calculated using equation (26) in the methodology?	ACM 0001 Version 19.0	DR	N/A	OK	OK
ACM 0022					
B.6.3.38. Are the baseline emissions determined according to equation (1) in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.39. Do the baseline emissions comprise the following sources?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.39.1. Methane emissions from the SWDS in the absence of the project activity;	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.39.2. Methane emissions from the treatment of organic wastewater in the absence of the project activity;	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.39.3. Energy generated or electricity consumed by the grid in the absence of the project activity;	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.39.4. Natural gas used from the natural gas network in the absence of the project activity	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.40. Are the baseline emissions of methane from the SWDS determined using the latest applicable version of methodological tool “Emissions from solid waste disposal sites” and all relevant requirements in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.3.41. If applicable, has the baseline under a suppressed demand scenario been applied in line with all relevant requirements in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.42. Are the baseline emissions from organic wastewater calculated using Equation 3 and other relevant equations in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.43. Are the baseline emissions from generation of energy calculated using Equation 14 and other relevant equations in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.44. Are the baseline emissions associated with natural gas use ($BE_{NG,y}$) calculated using Equation 17 and other relevant equations in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.45. Are the project emissions in year y calculated for each alternative waste treatment option implemented in the project activity calculated using Equation 18 in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.46. Are the project emissions associated with composting or co-composting ($PE_{COMP,y}$) calculated according to the latest applicable version of methodological tool “Project and leakage emissions from composting”?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.47. Are the project emissions from anaerobic digestion ($PE_{AD,y}$) calculated according to the latest applicable version of methodological tool “Project and leakage emissions from anaerobic digesters”?	ACM 0022 Version 2.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.3.48. Are the project emissions from gasification ($PE_{GAS,y}$) calculated using Equation 19 in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.49. Are the project emissions associated with mechanical or thermal production of RDF/SB ($PE_{RDF\_SB,y}$) calculated using Equation 20 in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.50. . Are the project emissions from incineration ($PE_{INC,y}$) calculated using Equation 21 in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.51. Are the project emissions from electricity consumption due to waste treatment process implemented under the project activity ($PE_{EC,t,y}$) calculated using the latest applicable version of "Tool to calculate baseline, project and/or leakage emissions from electricity consumption".	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.52. Are the project emissions from fossil fuel combustion associated with waste treatment process implemented under the project activity ($PE_{FC,t,y}$) calculated using the latest applicable version of "Tool to calculate project or leakage CO_2 emissions from fossil fuel combustion"?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.53. Are the project emissions from combustion within the project boundary ($PE_{COM,c,y}$) calculated using Equation 22 in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.54. Are the project emissions of CO_2 from combustion within the project boundary ($PE_{COM\_CO2,c,y}$) calculated using Option 1,	ACM 0022 Version 2.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
2 or 3, whichever is applicable, in the methodology?					
B.6.3.55. Are the project emissions of CH_4 and N_2O from combustion within the project boundary ($PE_{COM\_CH4,N2O,c,y}$) calculated using Option 1 or 2, whichever is applicable, in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.56. If the run-off wastewater generated by the project activityis treated in the anaerobic digester, are the emissions from run-off wastewater management ($PE_{ww,t,y}$) calculated according to the latest applicable version of procedure "Project emissions from anaerobic digestion"?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.57. If the project activity generates run-off wastewater that is treated anaerobically (other than in an anaerobic digester that is part of the project activity), stored anaerobically or released untreated, are the emissions from run-off wastewater management (PEww,t,y) calculated using Equation 29 in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.58. Are the leakage emissions calculated using Equation 31 in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.59. Are the leakage emissions associated with composting ($LE_{COMP,y}$) calculated according to the latest applicable version of the methodological tool "Project and leakage emissions from composting"?	ACM 0022 Version 2.0	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.3.60. Are the leakage emissions associated with anaerobic digestion of waste ($LE_{AD,y}$) calculated according to the latest applicable version of the methodological tool "Project and leakage emissions from anaerobic digesters"?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.61. Are the leakage emissions associated with RDF/SB ($LE_{RDF\_SB,y}$) calculated using Equation 32 and other relevant equations in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
B.6.3.62. Are the emission reductions calculated using Equation 35 in the methodology?	ACM 0022 Version 2.0	DR	N/A	OK	OK
AM0058					
B.6.3.63. Are the baseline emissions calculated using equation (1) in the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
B.6.3.64. Are the baseline emissions from heat generation calculated using equation (2) in the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
B.6.3.65. 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
B.6.3.66. Is the emission factor for new users calculated using equation (4) 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
B.6.3.67. 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
B.6.3.68. 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
B.6.3.69. Are the leakage emissions calculated using equation (7) and equation (8) in the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
B.6.3.70. Are the emission reductions calculated using equation (9) in the methodology?	AM0058 Version 5.0	DR	N/A	OK	OK
AMS-II.G					
B.6.3.71. Are emission reductionss calculated using equation (1) and (2) given in the methodology?	AMS II.G. Version 12.0 §24	DR	N/A	OK	OK
B.6.3.72. Is the emission factor of the fossil fuels projected to be used to substitute non-renewable woody biomass by similar consumers, either the default regional values provided in table 2 of the methodology or applying equation (3) of the methodology?	AMS II.G. Version 12.0 §25, 26	DR	N/A	OK	OK
B.6.3.73. Is the fraction of non renewable biomass (fNRB) fixed ex nate or would be determined ex post?	AMS II.G. Version 12.0 §27	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.3.74. How are the biomass savings computed using the options provided in the methodology?	AMS II.G. Version 12.0 §28	DR	N/A	OK	OK
B.6.3.75. Are the biomass savings computed following option 1 (Thermal Energy Output (TEO)) applying equation (4) and (5) of the methodology?	AMS II.G. Version 12.0 §29, 30	DR	N/A	OK	OK
B.6.3.76. Are the biomass savings computed following option 2 (Kitchen Performance Test (KPT)) applying equation (6) of the methodology?	AMS II.G. Version 12.0 §31	DR	N/A	OK	OK
B.6.3.77. Are the biomass savings computed following option 3 (Water Boiling Test (WBT)) applying equation (7) or (8) of the methodology?	AMS II.G. Version 12.0 §32	DR	N/A	OK	OK
B.6.3.78. Are the biomass savings computed following option 4 (Controlled Cooking Test (CCT)) applying equation (9) of the methodology?	AMS II.G. Version 12.0 §33	DR	N/A	OK	OK
B.6.3.79. Does the calculation account for more than one device per household?	AMS II.G. Version 12.0 §34	DR	N/A	OK	OK
B.6.3.80. If the baseline or project fuel is charcoal, is the quantity of woody biomass determined by using a default wood to charcoal conversion factor of 6 kg of firewood (wet basis) per kg of charcoal (dry basis credible conversion factor) or based on credible local conversion factor?	AMS II.G. Version 12.0 §35	DR	N/A	OK	OK
B.6.3.81. Is the lifetime of each type pf project device documented in the PDD based on manufacturer's specification?	AMS II.G. Version 12.0 §36	DR	N/A	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.3.82. Is it indicated as to how the loss in efficiency of the project devices i in each batch j due to aging shall be accounted during the monitoring period?	AMS II.G. Version 12.0 §37	DR	N/A	OK	OK
B.6.3.83. Is it indicated as to how leakage related to the non-renewable woody biomass saved by the project activity shall be assessed?	AMS II.G. Version 12.0 §41	DR	N/A	OK	OK
B.6.3.84. Project activities switching from baseline device using firewood to efficient project device using charcoal or switching from firewood to efficient project device using processed biomass (briquette, pellets, and woodchips) shall take into account the leakage effects related to the charcoal or processed biomass production.	AMS II.G. Version 12.0 §42	DR	N/A	OK	OK
The Gold Standard Methodology for Emission Reductions from Safe Drinking Water Supply					
B.6.3.85. Is the baseline emission factor determined using equation (1) given in the methodology?	SDWS Version 1.0 §3.6.1	DR	N/A	OK	OK
B.6.3.86. Is the specific energy required to boil water for the baseline technology accounts for the stove efficiency following equation (2) of the methodology?	SDWS Version 1.0 §3.6.2	DR	N/A	OK	OK
B.6.3.87. Are the baseline emissions determined using equation (3) given in the methodology?	SDWS Version 1.0 §3.6.3	DR	N/A	OK	OK
B.6.3.88. Is the quantity of safe drinking water provided by the project is calculated	SDWS Version 1.0	DR	N/A	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
using one of two methods provided in the methodology?	§3.6.4-8				
B.6.3.89. Are the project emissions determined using equation (8) to (10) given in the methodology	SDWS Version 1.0 §3.7	DR	N/A	OK	OK
B.6.3.90. Are the leakage emissions properly accounted as given in the methodology	SDWS Version 1.0 §3.8	DR	N/A	OK	OK
The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste					
B.6.3.91. Are the baseline emissions calculated using equation (1) in the methodology?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.6.3.92. Are the baseline emissions from animal waste treatment calculated using equation (2) in the methodology?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.6.3.93. Are the baseline emissions from baseline CH4 emissions from manure treatment using equation (3) in the methodology?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.6.3.94. Has $VS_{LT,y}$ been determined using the options available in the methodolgy?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.6.3.95. Has LT (NL_T) been determined using the options available in the methodolgy?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.6.3.96. Has the baseline emissions associated with electricity generation (BEEC,y) be calculated using the latest applicable version of “Tool to calculate baseline,	MMS & MSW version 1.0	DR	N/A	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
project and/or leakage emissions from electricity consumption"?					
B.6.3.97. Are the baseline emissions associated with heat generation (BEHG,y) calculated using equation (11) in the methodology?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.6.3.98. Are the project emissions calculated properly using equations (12) to (21), where relevant, in the methodology?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.6.3.99. Are the leakage emissions calculated properly using equations (22) to (32), where relevant, in the methodology?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.6.3.100. Are the emission reductions calculated properly using equations (33) and (34) in the methodology?	MMS & MSW version 1.0	DR	N/A	OK	OK
B.6.4. Summary of the ex-ante estimates of each SDG impact					
B.6.4.1. Have the PDs summarized the results of the ex-ante calculation of emission reductions for all years of the crediting period, using the tabular format?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7. Monitoring Plan					
B.7.1. Data and parameters to be monitored					
B.7.1.1. In the data/parameter tabular formats for monitoring, has the name of each relevant SDG indicator been included?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.7.1.2. In the data/parameter tabular formats for monitoring, has the name of each data/parameter been included?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.3. Has the unit of each data/parameter been included?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.4. Has the description of each data/parameter been included?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.5. Has the source of each data/parameter been included?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.6. Where several sources of data/parameters are used, is the choice of data/parameter sources explained and justified?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.7. Has the applied value of each data/parameter been included?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.8. Has the measurement methods and procedures been included?)	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.9. Has the PDs included which measurement equipment is used for monitoring?	GS-PDD-FORM Ver. 1.2	DR	The serial numbers on 3rd MP documents do not match with info of changed meters in meter change protocols, please provide all meter information in PDD	CAR-5	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
			Please correct format of footnote 20		
B.7.1.10. Have the PDs included description of calibration procedures for the monitoring equipment including the following?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.10.1. Frequency of the calibration	GS-PDD-FORM Ver. 1.2 CDM project standard for project activities §81c ACM 0002 Version 21.0	DR	Yes	OK	OK
B.7.1.10.2. Accuracy of the calibration	CDM project standard for project activities §81b	DR	Yes	OK	OK
B.7.1.10.3. Uncertainty of the calibration	CDM project standard for project activities §81b	DR	Yes	OK	OK
B.7.1.10.4. Calibrating agency/person	CDM project standard for project activities §81c	DR	Yes	OK	OK
B.7.1.10.5. The relevant national/international standards	CDM project standard for project activities §81c	DR	Yes	OK	OK
B.7.1.11. Has the accuracy level of the measurement method included?	CDM project standard for	DR	Yes	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	project activities §81b				
B.7.1.12. Has the responsible person/entity for the measurements included?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.13. Has the interval for the measurements included?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.14. Has the monitoring frequency for each data/parameter been included?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.15. Has the QA/QC procedures of each data/parameter been included?	GS-PDD-FORM Ver. 1.2 CDM project standard for project activities §81a ACM 0002 Version 21.0	DR	Yes	OK	OK
B.7.1.16. Has the purpose of data/parameter been chosen as one of the following for each data/parameter?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.16.1. Calculation of baseline outcome;	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.16.2. Calculation of project outcome;	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.7.1.16.3. Calculation of leakage.	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
B.7.1.17. Have the PDs 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?	CDM project standard for project activities §78 CDM validation and verification standard for project activities §117	DR	Yes	OK	OK
B.7.1.18. Does the monitoring plan include all data, parameters and related information required by the selected methodology(ies)?	CDM validation and verification standard for project activities §118a-ii ACM 0002 Version 21.0	DR	Yes	OK	OK
B.7.1.19. Are the monitoring arrangements described in the monitoring plan feasible within the project design?	CDM validation and verification standard for project activities §118b	DR	Yes	OK	OK
AM0058					
B.7.1.20. Is the heat supplied to final consumers measured at each sub-station as part of the monitoring plan?	AM0058 Version 5.0	DR	N/A	OK	OK
AMS-II.G					

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.7.1.21. Please add questions					
The Gold Standard Methodology for Emission Reductions from Safe Drinking Water Supply					
B.7.1.22. Please add questions					
B.7.2. Sampling plan					
B.7.2.1. Are the data and parameters monitored in section B.7.1 of the PDD determined by a sampling approach?	GS-PDD-FORM Ver. 1.2 CDM validation and verification standard for project activities §29e CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities	DR	N/A	OK	OK
B.7.2.2. If the data and parameters monitored in section B.7.1 of the PDD are to be determined by a sampling approach, has the PD 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"?	GS-PDD-FORM Ver. 1.2 CDM Standard: Sampling and surveys for CDM project activities and programmes of activities §29 §30 §31	DR	N/A	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	§32 §33				
B.7.2.3. If the sampling approach is used by the PDs, does the sampling plan present a reasonable approach for obtaining unbiased, reliable estimates of the variables?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40a	DR	N/A	OK	OK
B.7.2.4. If the sampling approach is used by the PDs, are the elements of objectives and reliability requirements complete?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40a-i	DR	N/A	OK	OK
B.7.2.5. If the sampling approach is used by the PDs, do the requirements specified agree with those stated in the appropriate standards?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40a-i	DR	N/A	OK	OK
B.7.2.6. If the sampling approach is used by the PDs, is the population in the sampling plan clearly defined?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40b	DR	N/A	OK	OK
B.7.2.7. If the sampling approach is used by the PDs, is the proposed sampling approach clear?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40c	DR	N/A	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.7.2.8. If the sampling approach is used by the PDs, does the sampling approach comply with the description of the population?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40c-ii	DR	N/A	OK	OK
B.7.2.9. If the sampling approach is used by the PDs, is the proposed sample size adequate to achieve the minimum confidence/precision requirements?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40d	DR	N/A	OK	OK
B.7.2.10. If the sampling approach is used by the PDs, is the ex-ante estimate of the population variance needed for the calculation of the sample size adequately justified?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40d	DR	N/A	OK	OK
B.7.2.11. If the sampling approach is used by the PDs, is the sample representative of the population?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40e	DR	N/A	OK	OK
B.7.2.12. If the sampling approach is used by the PDs, is it identified how the sampling frame would be kept?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40e-ii	DR	N/A	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.7.2.13. If the sampling approach is used by the PDs, are the methods of data collection clear and unambiguous?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40f-i	DR	N/A	OK	OK
B.7.2.14. If the sampling approach is used by the PDs, are the procedures for the data measurements defined appropriately and clearly?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40g	DR	N/A	OK	OK
B.7.2.15. If the sampling approach is used by the PDs, do the procedures for measurements adequately provide for minimizing non-sampling errors?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40g	DR	N/A	OK	OK
B.7.2.16. If the sampling approach is used by the PDs, is the quality control and assurance strategy adequate?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40g-i	DR	N/A	OK	OK
B.7.2.17. If the sampling approach is used by the PDs, are the proposed skill sets, qualifications and experience of the personnel to be engaged to conduct sampling adequate?	CDM Guideline: Sampling and surveys for CDM project activities and programmes of activities §40h-i	DR	N/A	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.7.3. Other elements of monitoring plan					
B.7.3.1. Has the operational and management structure been given in the monitoring plan to monitor emission reductions and any leakage generated by the project activity?	GS-PDD-FORM Ver. 1.2 CDM project standard for project activities §82a	DR	Organization chart provided	OK	OK
B.7.3.2. Has the PD clearly indicated the responsibilities and institutional arrangements for data collection and archiving?	GS-PDD-FORM Ver. 1.2 CDM project standard for project activities §82c	DR	Yes	OK	OK
C. Duration and crediting period		**This section of the PDD is not reviewed as the project is under validation for renewal of crediting period.**			
C.1. Duration of project					
C.1.1. Start date of project					
		DR	Yes	OK	
C.1.2. Expected operational lifetime of project		**This section of the PDD is not reviewed as the project is under validation for renewal of crediting period.**			
C.2. Crediting period of project					
C.2.1. Start date of crediting period					

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
C.2.1.1. Is the start date of the crediting period of the project activity given in DD/MM/YYYY format?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
C.2.1.2. Have the PDs determined only one start date for the crediting period, even in cases of phased implementation of the proposed project activity?	CDM Project Standard for Project activities §89	DR	Yes	OK	OK
C.2.1.3. Has the PDs used any qualifications to the start date, such as "expected"?	CDM Project Standard for Project activities §90	DR	No	OK	OK
C.2.2. Total length of crediting period					
C.2.2.1. Is the length of the crediting period of the proposed project activity stated in years and months under section C.2.3 of the PDD?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
D. Summary of Safeguarding Principles and Gender Sensitive Assessment					
D.1. Safeguarding principles that will be monitored					
D.1.1. Has the safeguarding principles that will be monitored been summarized including the mitigation measures added to the monitoring plan? Have the PDs carried out an analysis of the social, economic and environmental impacts following the GS4GG Safeguarding Principles and Requirements?	GS-PDD-FORM Ver. 1.2	DR	Please organize format of safeguarding principles in line with PDD template (eliminate the 2 different table formats in this section) Please use title "data and parameters that won't be monitored in CP2"	CAR-6	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
			Please make the "data and parameters that won't be monitored in CP2" section in line with previously approved documents (organize section D.1 of monitoring period)		
D.1.2. Are all the safeguarding principles stated?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
D.1.3. Are all the relevant assessment questions included pertaining to the safeguarding principles?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
D.1.4. Is the relevance of the principle cited correctly (Yes/potentially/no)?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
D.1.5. Is proper justification for the safeguarding principle indicated?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
D.2. Assessment that project complies with 'gender sensitive' requirements					
D.2.1. Has the evidence been provided that the project concept and design cover the overall societal context from a gender perspective?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
D.2.2. Does the project reflect the key issues and requirements of Gender Sensitive design and implementation as outlined in the Gender Policy?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
D.2.3. Has it been explained how the project align with existing country policies, strategies and best practices?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
D.2.4. Has an expert been involved for the Gender Safeguarding Principles & Requirements, where required?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
D.2.5. Has it been explained how the project address the questions raised in the Gold Standard Safeguarding Principles & Requirements document?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
D.2.6. Does the project apply the Gold Standard Stakeholder Consultation & Engagement Procedure, Requirements & Guidelines?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
E. Summary of Local Stakeholder Consultation		**This section of the PDD is not reviewed as the project is under validation for renewal of crediting period.**			
E.1. Summary of stakeholder mitigation measures					
E.2. Final continuous input / grievance mechanism					
E.2.1. Has the relevant methods and all details of chosen methods been provided in the related tabular format?	GS-PDD-FORM Ver. 1.2	DR	Please provide complimentary stakeholder consultation evidences Please provide evidence for logbook	CAR-7	OK
E.2.2. Has the following been provided as the mandatory methods as part of the final continuous input / grievance mechanism	GS-PDD-FORM	DR	Yes	OK	OK

*DR= Document Review, I= Interview

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	Ver. 1.2				
E.2.2.1. Continuous input / grievance expression process book	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
E.2.2.2. GS contact	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
F. Other Requirements					
F.1. Forward action requests (FARs) identified during previous verification and/or design change review					
F.1.1. Are there any FARs from the previous verification and/or design change review, if applicable, stages?	CDM validation and verification standard for project activities §36	DR	No, verification report of third monitoring period did not state any FARs. There are no other reviews that could be obtained from SustainCert side.	OK	OK
	DR				
Appendix-1 Safeguarding principles assessment					
1. Has the safeguarding principles assessment been completed for each principle using the relevant tabular format?	GS-PDD-FORM Ver. 1.2	DR	Please state “Justification of Relevance (Yes/potentiall y/no)” for “Principle 9.6 Pesticides & Fertilisers”	CAR-8	OK
2. Has the justification of relevance for the related safeguarding principles assessment been provided?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
3. If the respond is yes for the justification of relevance, has all relevant requirements from the GS4GG Safeguarding Principles and Requirements document been included in the tabular format?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
4. If the respond is no or potentially for the justification of relevance, has this been justified clearly and adequately?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
Appendix-2 Contact information of project developers					
1. Is the contact information of PDs provided in Appendix 2?	GS-PDD-FORM Ver. 1.2	DR	Yes	OK	OK
Appendix 3- LUF additional information					
1. In case of land use and forest projects, has the additional information been provided in Appendix-3?	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK
Appendix-4 Summary of approved design changes					
1. If applicable, is the summary of the approved design changes been provided?	GS-PDD-FORM Ver. 1.2	DR	N/A	OK	OK

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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 developers' Response	Validation Team Conclusion
CAR-1 a)Please delete sheets other than "Combined Margin EF" from excel b)PDD states "26,669" and excel states "26,693", please revise	2	a) The Baselince Calculation excel sheet includes only "Combined Margin EF" now. b) All of them has revised as 26,693 in the PDD	Review 1: a)Ok Closed(Deleted) b)Ok Closed(Revised).
CAR-2 -Please revise "The average value of Çataltepe WPP's electricity generation between 2010 and 2021. (12 years)." Because the data is based on "2012-2021". b-Please provide PDD that states "project is estimated to supply grid as 96,291 MWh and 61,122 tCO2-eq per annum and which total to reduction of 427,856 tCO2-eq over these first 7-year crediting period according to registered PDD." These numbers do not match with validation report.	3	a) The average value of Çataltepe WPP's electricity generation as revised as "between 2012 and 2021. (10 years)" b) The related paragraph has been revised in A.1 of the PDD. c) The correct capacity has revised as 16 MW instead of 20.7 MW: "The project's capacity was increased to 27.75 MW in 2019. But PP can use only 16 MW capacity's electricity generation."	Review 1: a)Ok Closed(Revised). b)Not closed (Registered PDD v10 states the below: Net electricity amount of 62,414 MWh per year, resulting in annual emission reductions of 39,618 metric tonnes CO2 and a total reduction of 277,328 tCO2 over the 7-year crediting period.

* 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 developers' Response	Validation Team Conclusion
c-Please correct this sentence "The project's capacity was increased to 27.75 MW in 2019. But PP can use only 20.7 MW capacity's electricity generation."			Please update paragraph in A.1 pf current PDD.) c) Ok Closed(Revised). Review 2: b) Ok closed (revised)
CAR-3 Please remove wording "expected" Please provide OFN information and excel	B.5.2	Expected wording has changed as "Actual" OFN has been revised without value.	Review 1: Not Closed(Please provide OFN). Review 2: Ok closed (revised)
CAR-4 Please remove jpeg in B.6.1 of PDD	B.6.1	The jpg has been deleted in Section B.6.1 of PDD	Review 1: Ok Closed(Deleted)
CAR-5 The serial numbers on 3rd MP documents do not match with info of changed meters in meter change protocols, please provide all meter information in PDD Please correct format of footnote 20	B.7.1.9	Cataltepe has made only only first verification period between 19/04/2011 and 31/07/2012 MP. And the old meters information have been provided on the PDD. The format of footnote 20 has corrected accordingly.	Review 1: Ok Closed(Revised)
CAR-6	D.1	"Data and parameters that won't be monitored in CP2" Title has used in Section D.1 of the PDD	Review 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 developers' Response	Validation Team Conclusion
Please organize format of safeguarding principles in line with PDD template (eliminate the 2 different table formats in this section) Please use title "data and parameters that won't be monitored in CP2" Please make the "data and parameters that won't be monitored in CP2" section in line with previously approved documents (organize section D.1 of monitoring period)		Health Impact of Electromagnetic Radiation, Air Quality and Road Quality have been added in Section D.1 of the PDD	Not Closed(Please also describe why you don't monitor *Health Impact of Electromagnetic Radiation *Air Quality *Road Quality as these patameters are stated tobe monitored in last monitoring report). Review 2: Ok Closed(Revised)
CAR-7 Please provide complimentary stakeholder consultation evidences Please provide evidence for logbook	E.2	The complimentary stakeholder consultation and log book evidences have already provided to the VVB	Review 1: Ok Closed(Provided)
CAR-8 Please state "Justification of Relevance (Yes/potentiall y/no)" for "Principle 9.6 Pesticides & Fertilisers"	Appendix-1	Principle 9.6 Pesticides & Fertilisers" Justificarion of Relevance"has been stated "No".	Review 1: Ok Closed(Provided)

* 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 developers' Response	Validation Team Conclusion
CAR-9 Please revise methoodology version in PDD and impact tool		The methoodology version has revised accordingly in PDD and impact tool.	Review 1: Ok Closed(Revised)
CAR-10 1)Please include the baseline emissions values as an integer value in the column E of the ER Calculation Excel spreadsheet. 2) Please clarify the necessity of L10-L17 and M10-M17 of ER Calculation Excel spreadsheet since both refers to the same thing. 3) Please correct the typo in the B20 cell of the ER Calculation Excel spreadsheet. 4) Please include the units in the D10,E10,F10 and G10 cells of ER Calculation Excel spreadsheet. 5) Please include round down function and as an integer value in D9 cell of ER Calculation Excel spreadsheet.		1) The baseline emissions values has been revised as an integer value in the column E of the ER Calculation Excel spreadsheet. 2) L10-L17 and M10-M17 of ER Calculation Excel spreadsheet has been added for SDG 7. 3) The typo in the B20 cell of the ER Calculation Excel spreadsheet has been corrected 4) The units in the D10,E10,F10 and G10 cells of ER Calculation Excel spreadsheet have been added. 5)D9 cell of ER Calculation Excel spreadsheet has been revised as accordingly.	Review 1: Ok Closed(Revised)

* 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 developers' Response	Validation Team Conclusion
6) Please use the latest EFgrid value published by the Ministry of Energy and Natural Resources. 7) Please correct the hyperlinks of latest EFgrid value throughout the PDD and in the ER Calculation Excel spreadsheet.		6) The latest EFgrid value published by the Ministry of Energy and Natural Resources has been used as 2020 one. PDD and ER Calculation Excel spreadsheet have been revised accordingly. 7) The hyperlinks of latest EFgrid value throughout the PDD and in the ER Calculation Excel spreadsheet has been corrected.	
CAR-11 Please clarify about the status of ERs and carbon credits from the start date of second CP (2018) to the submission of the project to GS (2022) in the PDD.		The second crediting period start on 19/04/2018 So PP has submitted deviation form to GS and GS has approved for issuance of VERs 3 years beginning of on-site visit 03/05/2022 which means PP can issue credits between 01/05/2019 to 31/04/2022 from 2nd crediting renewal period. And then PP will continue other verification process later for between 01/05/2022 and 18/04/2025. This sentences have been added under Ongoing Financial Need Section of the PDD.	Review 1: Ok Closed(Revised)
CAR-12 Please correct the SDG-7, SDG-8 and SDG-13 values in the SDG Impact Tool Excel.		The SDG-7, SDG-8 and SDG-13 values have been revised in the SDG Impact Tool Excel.	Review 1: Ok Closed(Revised)
CAR-13 Please include training parameter values as part of SDG-8 in the Table 1 of the PDD.		The training parameter values as part of SDG-8 have been added in the Table 1 of the PDD.	Review 1: Ok Closed(Revised)

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