VALIDATION REPORT

ENFAŞ ENERJİ ELEKTRİK ÜRETİM A.Ş.

SUTAS Tire Biogas Plant

in

TURKEY

PROJECT NUMBER: 622

Organizational Unit:	Re Carbon Ltd. Carbon Department		
Project Title:	SUTAS Tire Biogas Plant		
Project Number:	**Client:**		**Current PDD Version:**
622	ENFAŞ ENERJİ ELEKTRİK ÜRETİM A.Ş.		08
Date of First Issue:	**Date of Current Version:**	**Version Number:**	**Number of Pages:**
21/10/2021	04/06/2024	06	140

Summary:

Host Country: Turkey

Project is Reviewed Against:

☒ Kyoto Protocol ☒ UNFCCC CDM rules and regulations and associated documents

☒ Gold Standard rules and regulations ☐ Other (Please Specify)

Methodology: The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste (ACM0010, Version 07.0.0) **Version:** 1.0

Average Annual Emission Reduction Estimate: 114,851 tCO_2e

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

Type of Crediting Period:	Crediting Period Start Date:
☒Renewable ☐ Fixed	01/06/2022
Project Participants:	ENFAŞ ENERJİ ELEKTRİK ÜRETİM A.Ş.

Validation Stages:

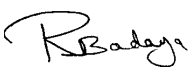
☒ Desk Review ☒ Site Visit ☒ Follow-up Interviews

☐ Global Stakeholder Consultation ☒ Resolution of Outstanding Issues

Validation Findings: During the validation 61 Corrective Action Requests and 11 Clarification Requests were raised, all of which were closed out before the issuance of this validation report. Two Forward Action Request was also raised during the validation.

In summary, it is Re Carbon Ltd.'s opinion that the project activity "SUTAS Tire Biogas Plant" in Turkey, as described in the PDD, version 08 dated 18/04/2024, meets all relevant UNFCCC requirements for the CDM, GS and all relevant host Party criteria and correctly applies the baseline and monitoring methodology 'GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste', version 1.0. Hence, Re Carbon Ltd. requests the registration of the proposed project activity as a GS project activity.

Validation Team Leader:	Sandeep Kanda	Indexing Terms:
Validation Team Members:	Fikriye Seda Atabek Seza Danişoğlu	☒No distribution without permission of the client or responsible organizational unit

Approved By (Technical Reviewer):	Name:	Signature:	☐ Limited Distribution
	Rohit Badaya		☐ 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
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
PP : Project Participant(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. has performed the validation of the “SUTAS Tire Biogas Plant” in “Turkey” between 01/10/2021 and 14/05/2024. The validation was performed on the basis of UNFCCC criteria for the Clean Development Mechanism (CDM), Gold Standard (GS) 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. Therefore, Re Carbon Ltd. will recommend the project for registration by the 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. will not recommend the project for registration by the Gold Standard and will inform the project participants and the Gold Standard on this decision.

2. INTRODUCTION

2.1. Objective

Re Carbon Ltd. has been appointed by "ENFAŞ ENERJİ ELEKTRİK ÜRETİM A.Ş." to perform the validation of the "SUTAS Tire Biogas Plant" in Turkey with the service agreement dated 28/12/2020. The objective of this validation activity is to have an independent third party for the assessment of the project design, and to ensure a thorough assessment of the proposed project activity against the applicable CDM and GS requirements. In particular;

- the project's baseline is assessed against "GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste', Version 1.0"
- the project's monitoring plan is assessed against "GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste', Version 1.0"
- the project's additionality justification is assessed against "Combined tool to identify the baseline scenario and demonstrate additionality", Version 07.0"
- 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
- CDM Project Cycle Procedure for project activities, version 3.0
- Gold Standard for Global Goals (GS4GG) version 1.2

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

2.2. Scope

The scope of the validation is the independent and objective review of the Project Design Document (PDD). The PDD is reviewed against the relevant criteria (see 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 version 3.0, CDM Project Standard version 3.0, CDM Project Cycle Procedure version 3.0 and GS4GG version 1.2.

The validation team has employed a risk-based approach to assess the completeness and accuracy of the claims and conservativeness of the assumptions in the PDD. The main focus of the validation team is to identify the significant risks for the project implementation and the generation of CERs. The validation is not meant to provide any consulting towards the project

participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

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

2.3. GHG Project Description

The project activity is a biogas-to-energy project that will generate renewable energy by capturing biogas from cattle manure, agricultural wastes are another organic waste source via anaerobic digestion and utilising it to produce thermal and electric energy through cogeneration system. The project is being implemented by ENFAS Enerji Elektrik Üretim A.Ş. in İzmir Tire district, İzmir province, in Turkey. ENFAS Enerji Elektrik Üretim A.Ş. is a subsidiary of SUTAS Group, the Group being one of the major companies in dairy products sector in Turkey and has several cattle farms for supply of milk to their production plants.

About 129,575 ton/year as cattle and chicken manure generated at farms will be collected daily through special sewage trucks to be fed into the proposed biogas power plant.

The cogeneration system to be installed will be designed with a total power of 4.380 MWm / 4.268 MWe with 4 identical gas engines and heat boilers for electricity and heat generation (capacity of each gas engine is 1067 kW). Related annual expected electricity generation is 29.876 GWh (7000 hours operation in a year). Whilst heat generated at the plant is used at the facility to warm the digesters, the electricity generated is directly fed to the Turkish national grid.

The project start date is 02/12/2014 corresponding to the purchase agreement of the cogeneration system. The crediting period start date of the project stated in the PDD is 01/06/2022 with choice of renewable crediting period.

2.4. Parties Involved

ENFAŞ ELEKTRİK ÜRETİM A.Ş. is the private entity project participant in the project and host country is Turkey.

3. METHODOLOGY

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

- Assessment whether the project design of the proposed GS project activity meets the relevant CDM and GS requirements, via a desk review of the PDD between 01/10/2021 and 17/11/2021.
- Assessment whether the applied methodology "GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste', Version 1.0", has been applied correctly, including the baseline selection and monitoring plan.
- Assessment of the additionality argument of the project activity against the rules and guidance given in "Combined tool to identify the baseline scenario and demonstrate additionality", Version 07.0".
- A remote online audit was conducted on 04/10/2021 to assess the implementation process of the project activity and to confirm stakeholders' comments.
- Assessment of data and calculation of greenhouse gas emission reductions.
- Issuance of the validation report
- Independent technical review (ITR)
- Approval of the validation report and request of registration

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

The Validation Protocol consists of two tables:

- Table 1 Gold Standard (GS) Toolkit, Project Design Document (PDD) and CDM validation requirements and
- Table 2 (Resolution of Corrective Action, Forward Action and Clarification Requests)

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

Table 3-1: Explanation about Table-1 in Validation Protocol

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

The usage description of Table-2 in Validation Protocol is explained in Table 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 Participants' Response	Validation Team Conclusion
The all CL, FAR and CARs determined during the draft validation report should be listed here	Gives reference to the checklist questions in Table-1 of Validation Protocol	Is used to summarize the responses by project participants regarding the non-conformities	Is used to summarize the responses by validation team and their conclusions

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

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 relevant 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 Independent Technical Reviewer (ITR), respectively. The validation team and ITR are assigned to this validation activity on 21/05/2020 taking all the above factors into consideration and as a result of the contract review process.

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

Table 3-3: Validation team and ITR details

Name	Role	Host Country Experience	Scope Coverage	Technical Expertise	Financial Expertise	Involvement*
Sandeep KANDA	Team Leader	☒	☒	☒	☒	DR, R
Seza DANIŞOĞLU	Financial Expert	☒	☐	☐	☒	DR, R
Fikriye Seda ATABEK	Validator	☒	☐	☐	☐	A, DR, R
Anıl SÖYLER	Trainee ITR	☒	☐	☐	☐	ITR
Rohit BADAYA	ITR	☒	☒	☒	☒	ITR

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

A : Administrative

DR : Desk Review

SV : Online Site Visit

R : Reporting

ITR : Independent Technical Review

3.2. Desk Review of PDD and Additional Documents

The basis for the validation activity is the PDD version 01, dated 30/09/2021 which was submitted to the validation team on 01/10/2021. This PDD was revised several times due to

the raised CARs and CLs, version 08 dated 18/04/2024 being the final version. The PDD was assessed against;

- The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reduction from Manure Management Systems and Municipal Solid Waste - Version 1.0 and the associated tools,
- the Host Country criteria
- CDM Validation and Verification Standard for project activities, version 3.0,
- CDM Project Standard for project activities, version 3.0
- CDM Project Cycle Procedure for project activities, version 3.0
- GS for Global Goals version 1.2

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

3.3. Site Visits

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

Table 3-4: Online site visit details

Date	04/10/2021	
Location	Online (remote)	
Participant	**Company Name**	**Role in the Organization / Role in the Site Visit**
Ali ASLAN	Enfaş Elektrik Üretim A.Ş.	Purchasing Chief
Serkan ANACAK	Enfaş Elektrik Üretim A.Ş.	Project and R&D Manager
Miray TUĞ	Enfaş Elektrik Üretim A.Ş.	Environmental Manager
Ecem ÖZDEMİR	Enfaş Elektrik Üretim A.Ş.	Environmental Specialist
Sandeep KANDA	Re Carbon Ltd.	Team Leader
Fikriye Seda ATABEK	Re Carbon Ltd.	Validator
Engin KOÇ	GTE Carbon Ltd.	Carbon Consultant
Ahmet ÇELİK	Tire District	Local Stakeholder

Points Verified	**Source of Information**
To confirm rightness of project description, as per GS PDD including project components and location	Document review and remote audit interviews with the local stakeholders from Tire district
To check the project development and operation	Document review and online remote audit
To interview with the local stakeholders about the project and its impacts	remote audit interviews with the local stakeholders from Tire district

It was also concluded that the grievance mechanism is in place and this was also confirmed by the interviewed local stakeholders during the online (remote) site visit. It could be confirmed that there has not been any complaint by the interviewed local stakeholders in line with the handled interviews and the checked photographic evidence of grievance notebook. The local stakeholders stated that there is no problem accessing the grievance notebook.

3.4. Reporting of Findings via the Validation Protocol

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

In line with 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 are explained below:

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

According to these principles total of 61 CARs and 11 CLs and 02 FAR were raised all of which are listed in the Validation Protocol.

3.5. Follow-Up Interviews

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

3.6. Resolution of Outstanding Issues

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

Action	Timeline	
	From	To
Desk Review	01/10/2021	16/10/2021
(Remote) Site Visit	04/10/2021	04/10/2021
Issuance of the Validation Protocol version 01		16/10/2021
Review of PPs Initial Set of Responses and subsequent loops	11/11/2021	17/11/2021
Closing of all the CARs and CLs		17/11/2021
Issuance of the Validation Report version 01		17/11/2021
ITR Process	17/11/2021	20/11/2021
Submission to the client	22/11/2021	
Revisions based on GS review comments rounds	04/06/2024	

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.

Moreover, there are three FARs from GS Preliminary Review. The FARs are as follows:

Forward Action Request #1: The PP shall include trainings of employees for occupational health and safety trainings and use of relevant safety protocols along with safety equipment to the monitoring plan.

Response: The trainings of employees for occupational health and safety trainings and use of relevant safety protocols along with safety equipment have been included in the PDD. Moreover, the relevant training records have been provided to the DOE.

Forward Action Request #2: The validating DOE shall make sure that the project emissions and leakage emissions (if any) are taken into account in accordance with the applicable methodology related with the composting process. The PP shall further include management of wastewater (as an output of the digester) into the monitoring plan.

Response: The proposed project activity does not involve composting. Therefore, LEComp,y shall be accounted as zero. Furthermore, the solid and liquid digestate (output of the digester) used as fertilizer in nearby agricultural land as free. This is confirmed by interviewing with the local stakeholders during the online (remote) site-visit.

Forward Action Request #3: The EIA and associated references in the LSC report shall be checked by the DOE during validation and provide their opinion in detail.

Response: EIA Report of the Project and other necessary documentations/online references such as IPCC related with both calculations and baseline situation provided to DOE during

validation progress. These references have been confirmed and found suitable by the validation team.

3.7. Internal Quality Control

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

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

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

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

4. VALIDATION FINDINGS

4.1. Participation Requirements

The project participant is ENFAŞ ENERJİ ELEKTRİK ÜRETİM A.Ş. (Project Owner, Private Entity).

Turkey is the host country. Turkey ratified the Kyoto Protocol on 5th February of 2009 and put in effect on 13th May 2009. Turkish National Focal Point to the UNFCCC is the Ministry of Environment and Forestry.

Through document review and remote audit interview, Re Carbon Ltd. confirmed that the project participants as listed in PDD are correct. It is also confirmed that no entities other than those authorized as project participant are included in the relevant sections of the PDD.

4.2. Project Design

The Project Design Document (PDD) complies with the guidance given in the "Gold Standard for the Global Goals Key Project Information & Project Design Document (PDD)", Version 1.2 issued by Gold Standard on 14/10/2020.

4.3. Project Description

The proposed project activity is a greenfield biogas-to-energy project that will generate renewable energy by capturing biogas from anaerobic digestion of organic wastes and utilizing it to produce thermal and electric energy through cogeneration system. The project is being implemented by ENFAŞ ENERJİ ELEKTRİK ÜRETİM A.Ş. in Tire district, İzmir Province in Turkey. The proposed project activity will use organic wastes such as cow manure, yeast extract and vegetable wastes collected from neighboring waste sources and provide an environmentally friendly solution to this manure management problem.

About 129,575 ton/year of dairy and cattle manure generated by the nearby farms will be collected daily and be used as substrate for the project activity. Within the scope of the planned project, biodegradation of organic wastes coming to the Biogas Plant in anaerobic environment will take place. The biogas that will be released during the biodegradation of organic wastes will be used for electricity and heat production in cogeneration unit. The cogeneration system to be installed will be designed with a total power of 4.268 MWe. Whilst heat generated at the plant is used at the facility to warm the digesters, the electricity generated is directly fed to the national grid.

The proposed project activity will not only reduce greenhouse gas (GHG) emissions that would otherwise be emitted directly to the atmosphere from cattle manure left to decay in anaerobic conditions, but also will provide sustainable development benefits to the host communities and the host country.

The license of the project confirming the capacity was issued by Energy Market Regulatory Authority (EMRA) on 01/09/2016, and the same too was validated during the document review. The project was fully commissioned at the time of remote audit on 04/10/2021 and supplying electricity to the grid. The project is in compliance with the Turkish regulations. ENFAŞ ENERJİ ELEKTRİK ÜRETİM A.Ş. is the generation license owner of the project activity.

The project contributes directly to achieving 'SDG#7: Affordable and clean energy' being a renewable electricity generation project; 'SDG#8: Decent work and economic growth' through employment generation and trainings; 'SDG#12: Sustainable Consumption and Production' through better waste management and 'SDG#13: Climate Action', by collection and use of methane for energy generation and displacing fossil fuel-based grid electricity, thereby reducing CO_2 emissions.

The biogas project is not gender sensitive project and does not adversely impact women or men. The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation, or any other basis.

Through document review and remote interview conducted, Re Carbon Ltd. Confirms that the description provided of the project is accurate, complete, and provides an understanding of the nature of the project.

4.4. Project Boundary

The boundary (geographically and related to GHG sources / sinks) are correctly given in section B.3 of the GSPDD and justified for the project activity. The spatial extent of the project boundary is clearly defined in line with ACM0010 Version 07.

The spatial extent of the project boundary encompasses the site of the AWMS(s), central treatment facility including the storage tanks and the site where the residual waste from biological treatment or products from those treatments, like slurry, are handled, disposed, submitted to soil application. The boundary also includes the onsite flare, electricity and heat generation equipment. The road itineraries between the manure collection points, waste/ residue transportation, the central treatment plant and sold waste disposal site are also part of project boundary. Also, all power plants connected physically to the electricity system (grid) that the project plant is connected to are included.

All the GHG allowed under the applied and applicable GS methodology are considered both in the baseline and project emissions (CO2, CH4, N2O). There are no other sources which are impacted by the project and not addressed by the applied methodology.

The project boundary confirmed during the remote audit along with the documentary evidence was found in conformance with the applied baseline methodology. All sources of GHG emissions required by the methodology have been included in the project boundary and are justified in reference to the project activity. There are no project emissions/leakage emissions of any sort which are not addressed by the applied methodology occurring because of the project activity.

4.5. Determination of the Baseline Scenario

As per ACM0010 Version 07, the baseline scenario for the waste treatment is considered as animal manure being left to decay in uncovered anaerobic lagoons within the project boundary and methane emitted to the atmosphere. The continuation of this operation of open lagoons is likely as the animal farms can treat the effluent in accordance with the local regulations. On the other hand, an alternative treatment method of directly discharging the manure to the water course is not plausible as this would not meet legal requirements.

Further, in the baseline scenario, the farm owner will not recover any methane generated by the anaerobic lagoons either for on-site utilization or flaring, the same is confirmed by the validation team as there is no regulation mandating to do so. Furthermore, the baseline scenario of open anaerobic lagoons was also confirmed through remote audit and documentary evidence of existing practices adopted by the dairy farms.

For the electricity generation, the baseline scenario is 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". The project supplies electricity generated from the gas engines to the national grid. Thus, the PDD correctly identifies baseline scenario comprised of electricity generation from grid-connected power plants in Turkey. The Combined Margin calculations as described in the Tool to calculate emission factor of an electricity system has been applied in the PDD.

For heat generation, the baseline scenario is heat supplied to the adjoining dairy plant by natural gas fired boilers.

Based on the site-visit and by cross-checking the information with similar relevant projects, also based on the validation team's local and sectoral knowledge, it is confirmed that the selected baseline scenario is the prevailing practice in the host country and in line with the host country regulations.

All the assumptions and data used by the PPs are listed in the PDD, including references and sources, all the references and documents used are relevant for establishing the baseline scenario and correctly quoted in the PDD, all relevant national and sectoral policies/regulations considered are listed in the PDD and the identified baseline scenarios reasonably represented what would occur in the absence of the proposed project activity.

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

Re Carbon Ltd. has assessed the relevant information contained in the PDD, remote online audit and evidence obtained against the application criteria listed in the methodology. The applicability of this methodology is justified as below:

- The proposed project activity is a greenfield single central treatment plant for manure management from multiple livestock farms where there is existing anaerobic manure treatment system. The same has been confirmed from the EPDK license issued to the project on 01/09/2016 and the remote audit of the existing cattle farms along with photographic evidence of the lagoons.
- The farms from which the animal waste is being treated manage the livestock in confined conditions as confirmed through the remote audit of the existing cattle farms and submitted documentary evidence.
- The depth of the existing lagoons at the farm being more than 1 m was validated based on the remote audit of the existing cattle farms along with photographic evidence of the lagoons.

- The annual average ambient temperature at the site where the anaerobic manure treatment facility in the baseline existed is higher than 5°C, at about 17.9°C, as confirmed through the Turkish official metrology statistics.
- The minimum retention time of manure waste in the baseline anaerobic lagoons is greater than 1 month, as confirmed through the remote audit of the existing cattle farms and submitted documentary evidence.
- The project AWMS does not lead to leakage of manure waste into ground water, as confirmed from the design specifications of the digestors.
- The project does not store residue in between the collection activities as confirmed through the design specifications and layout.
- The manure/treated residue usage as fertilizer in the baseline and project is confirmed through interviews with the local stakeholders.
- The emission reductions are being claimed by the central treatment plant only.
- The project is generating renewable electricity from the biogas and connected to the Turkish national grid,
- The geographic and system boundaries for the Turkish national electricity grid can be clearly identified and information on the characteristics of the grid is available.

According to ACM0010 V7, the latest approved tools shall be referenced in PDD like, “Tool to calculate the emission factor for an electricity system” (Version 7) and “Combined tool to identify the baseline scenario and demonstrate additionality” (Version 7.0), which are the latest versions of the tools valid at the starting time and the above tools are applied to the PDD.

Re Carbon Ltd. confirms that the selected baseline and monitoring methodology is applicable to the project activity and applies the latest version valid at the time of submitting the project activity for registration.

4.7. Additionality

The additionality of the project has been demonstrated using the “Combined tool to identify the baseline scenario and demonstrate additionality”, version 7.0.

In accordance with combined tool, identification of alternatives, compliance with national regulations, investment analysis and common practice analysis have been checked by the validation team through document review, remote audit and interview. Re Carbon Ltd. confirms that all data, rationales, assumptions and justifications presented in the PDD and documentation provided by PP to support the demonstration of additionality are reliable and credible.

4.7.1. Prior CDM consideration

The prior consideration of carbon revenues by the project has been evidenced from the documentation carried out by the project prior to the start date indicated as 02/12/2014.

PP has demonstrated continuing and real actions being performed to secure Design Certification via evidence and timeline considering the project being listed with GS in 2017 and documents for registration uploaded in 21/11/2021, for the time in between, as follows:

i. Valid contract(s) with project consultants: VVB has confirmed it through 'Amended agreement between Project Representative and Project Owner (dated as 01/2019)'. Project Representative is also authorized for ERPAs as per signed agreement with Project Owner. Also, corresponding e-mails about invoices between Project Representative and Project Owner too have been submitted (dated as 12/2019).

ii. Emission Reduction Purchase Agreements (ERPAs) or other documentation related to the sale of the potential ERs. There is no sale agreement, since even certification has not been finalized yet.

iii. Evidence of agreements or negotiations with a VVB for validation services: The PP signed agreement with VVB on 22/06/2020.

Thus, VVB confirms that the gap period is not more than 3 years and real action to secure design certification has been carried out by PP in between 2017-2021.

4.7.2. Project alternatives

The PP identifies following alternatives to the proposed project:

Animal waste:

- Animal waste management in anaerobic digesters capturing and utilizing the biogas, undertaken without being registered as a GS VER project activity; and
- Animal waste management in open anaerobic lagoons without methane utilization or flaring.

Heat:

- H1: Heat generation from biogas, undertaken without being registered as a GS VER project activity; and
- H4: Heat generation in existing or new on-site or off-site fossil fuel based boiler(s) or air heater(s).

Electricity:

- E1: Electricity generation from biogas, undertaken without being registered as a GS VER project activity; and
- E3: Electricity generation in existing and/or new grid-connected power plant.

The list of these alternatives is considered to be complete, viable and realistic and comply with all applicable legislation. The TEIAS statistics have been checked to validate the same.

All the alternatives are in compliance with the national laws and regulations:

Electricity Market Law; Law on Utilization of Renewable Energy Resources for the Purpose of Generating Electrical Energy; Forest Law; Environment Law; and Regulation on Environmental Impact Assessment.

Re Carbon Ltd. confirms that in the PDD, the identified alternatives are appropriate, credible, and complete.

4.7.3. Investment analysis

Equity IRR is calculated for financial analysis.

Choice of approach

For the investment analysis, the Benchmark Analysis (Option III of Step 2 of Tool for the Demonstration and Assessment of Additionality) is selected in project PDD. The same is accepted since simple cost analysis (Option I) and investment comparison analysis (Option II) are not appropriate in line with the Tool for the Demonstration and Assessment of Additionality. The project accrues financial benefits with the sale of electricity to the grid and the alternative baseline scenario of the proposed project is the continuation of the supply of electricity by the grid rather than a comparable investment project.

Hence Re Carbon Ltd. Confirms that the adoption of Benchmark analysis (Option III) is appropriate.

Benchmark selection

As a benchmark, in line with the requirements of "Tool for the demonstration and assessment of additionality", the project owners use the benchmark rate according to the "The Role of Institutional Investors in Financing Clean Energy", OECD Working Papers on Finance (2012) (page 23 of document) cited value of 12% for the threshold equity IRR. The validation team reviewed the World Bank report and also reviewed other registered projects in the region to confirm the choice of benchmark as appropriate.

Input parameters

PP has calculated project IRR for a 19-year period, which is conservative. All the input parameters used in the financial analysis are taken from approved and trustworthy documents and all references are shown to the validation team.

Re Carbon Ltd. compared the input parameters for the financial analysis included in the PDD and IRR spreadsheet with the parameters stated in the reference documents listed in below table and was able to confirm that the values applied are consistent with the values stated in the references. IRR input documents were valid at the time of investment decision.

Table 4-1 includes the inputs for IRR analysis and validation proofs:

Table 4-1: IRR inputs

Parameter	Unit	Value	Reference Document
Installed Capacity	MW	4.268	Electricity Generation License
Annual electricity generation	GWh	29.876	Electricity Generation License
Capital Investment	Million USD	13.407	Feasibility study
Operation & Maintenance cost	Cent/kWh	1.807	Feasibility study
Electricity sales tariff	USD cent / kWh	13.3	Renewable Energy Law
Income tax rate	%	22	Tax law

Installed capacity and annual electricity generation license values are taken from the electricity generation license and confirmed further with the energy yield assessment report, which were valid at the time of investment decision.

The inputs considered for the IRR calculations have all been verified, as follows:

Input	Reference
Land cost	Land Cost_Tire Project
Engineering, procurement and construction cost	ONAYLI SÖZLEŞME_Süt Fabrikası ve Biyogaz Tesisinin Ortak İnşaat Sözleşmesi.pdf
Labor cost	Collected from the site personnel
Operation and maintenance cost	Project Owner Data
Capital cost	Project EPC Contract/Agreement
Project assets investment cost	ONAYLI SÖZLEŞME_GE JENBACHER_4 tane gaz motoru ve diğer ekipmanların ortak sözleşmesi.pdf

Calculation and conclusion

Equity IRR has been calculated as 11.52% in the absence of carbon revenue.

It is appropriate to carry out the IRR analysis for 19 years as it covers the crediting period.

The calculations were verified and found to be correct by Re Carbon. The assumptions used in the calculations were deemed to be correct by Re Carbon.

Sensitivity analysis

Sensitivity analysis has been carried out for Investment Cost (±10%), O&M Costs (±10%), and electricity income (±10%). All the variables not included in sensitivity analysis, which constitute less than 20% do not have material impact on the analysis. Reasonable variations of the above stated parameters were checked as in Table 4-2below:

Table 4-2: IRR inputs

Fluctuating Indicators	Fluctuations	
	-10%	+10%
Investment Cost	13.39%	10.70%
O&M Costs	12.68%	10.94%
Annual generation	9.02%	12.75%

Investment Costs

The validation team validated the IRR calculations to confirm that the IRR would cross the benchmark with 10% drop in investment costs. However, with the agreements in place the cost reduction has been ruled out.

Annual operation costs

The validation team validated the IRR calculations to confirm that the IRR would only marginally cross the benchmark with 10% reduction in operating costs.

Annual generation

The validation team validated the IRR calculations to confirm that the IRR would cross the benchmark when the income through electricity is increased by 10%. The income through electricity is a function of electricity generation and the tariff.

Therefore, it is not probable to envision a continuous substantial increase for the electricity production that is served to the grid, in order to enhance the equity IRR upwards.

Outcome of Step 2: The proposed project activity is unlikely to be the most financially/economically attractive as indicated in the 'Tool for Demonstration and Assessment of Additionality' (Version 07.0.0), as per Step 2c Para 10 b. The additionality of the project activity has been assessed in the above section through investment analysis and it is concluded that a financially more viable alternative to the project activity would have led to higher emissions.

It is seen that project is not the most attractive option. Therefore, the project is considered as additional to the baseline scenario. In conclusion, Re Carbon was able to confirm that this project activity is financially unattractive even after considering the possible fluctuation of the main parameters, and the above analysis is appropriate and in line with paragraph 96-102 of Validation and Verification Standard for project activities, version 03.

4.7.4. Barrier analysis

No barrier analysis is used for additionality justification.

4.7.5. Common practice analysis

The Methodological tool "Common Practice", Version 03.1 EB84, Annex 7 has been applied.

For the common practice analysis, the geographical boundary is selected as the Turkish Electricity Grid to be in line with the methodology.

Following steps were followed in line with the tool:

Step 1: Calculate applicable output range as +/-50% of the design output or capacity of the proposed project activity.

Since the installed capacity of the project is 4.268 MW, the total capacity of biogas power plants, which were included in the analysis were between 2.134 MW – 6.402 MW.

Step 2: In the applicable geographical area, identify all plants that deliver the same output or capacity, within the applicable output range calculated in Step 1, as the proposed project activity and have started commercial operation before the start date of the project. Note their number Nall. Registered CDM project activities and projects activities undergoing validation shall not be included in this step.

As per the General Directorate of Energy Affairs, of all the operational biomass-based power plants, based on 2016 data, only 19 of which only 7 are within the indicated applicable range of which further 5 projects are excluded as they have different biomass fuel and process technology. Only two biogas projects remain, and both are VER projects.

All power plants that have same capacity, within the applicable range has been listed in a separately submitted spreadsheet. Properties of the power plants are also indicated in this excel sheet. The same could be validated based on the indicated sources. After excluding the VER projects, the list has only one project remaining. The common practice sheet has been re-worked by the validation team; compared with other registered projects and found to be correct.

Nall = 1

Step 3: Within plants identified in Step 3, identify those that apply technologies different that the technology applied in the proposed project activity. Note their number Ndiff.

Since there is no remaining project with a different scale and different technology than the project plant.

Ndiff = 0

Step 4: Calculate factor F=1-Ndiff/Nall representing the share of plants using technology similar to the technology used in the proposed project activity in all plants that deliver the same output or capacity as the proposed project activity

F= 1- 0/1

Nall – Ndiff = 1 – 0 = 1

According to the Methodological tool on Common Practice, if the factor F is greater than 0.2 and Nall-Ndiff is greater than 3, then the proposed project is a “common practice”.

For the proposed project, F is more than 0.2, but Nall – Ndiff is just 1, therefore, the proposed project is not common practice within the region.

Re Carbon could validate the conclusion of the PP that the is not a common practice in Turkey.

In summary, it is clearly demonstrated that the project is not a likely baseline scenario, and the emission reductions are additional to what would have happened in absence of the project activity.

4.8. Monitoring

The monitoring plan in the PDD is as per the applied methodology ACM0010, Version 07. The emission coefficient of the grid has been fixed ex-ante and will not be updated during the renewable crediting period.

In line with the methodology, the PDD includes all the parameters, as follows: location of manure collection points, total number of farms, number of animals in the farms daily discounting dead and discarded animals, Mass of manure disposed outside project boundary, fraction of manure handled, Annual Average ambient temperature at project site, Maximum methane producing potential of the volatile solid generated by animal type LT, biogas flow, volumetric fraction of CH4 on a dry basis, flare monitoring, amount of electricity generated using biogas, amount of heat generated using biogas by the project activity, and fuel consumption due to the project activity in transporting the manure from farms to the project plant.

The amount of biogas generated will be measured using flow meters, methane content in the biogas through gas analyser, net quantity of heat based on steam supplied with associated temperature and pressure for enthalpy determination deducting the condensate return and electricity fed into the grid by the project will be monitored continuously by redundant metering devices, two of them being the main ones at the substation, which provides the data for the monthly invoicing to TEİAŞ.

4.9. Calculation of Emission Factor and Emission Reductions

The emission reduction calculation estimations have been presented in the PDD as per the applied GS methodology ACM0010, Version 07. For the methane destruction part there is no

change except for the change in global warming potential of methane as 28 from 01/01/2021 onwards. Further, the emission coefficient of the grid has been updated and the emission reduction estimates are revised. The baseline emissions from electricity generation are calculated based on the grid emission factor coefficient multiplied by the expected net electricity generation, which amounts to 29.876 GWh per annum. Furthermore, the heat supplied to the dairy unit of 31.09 TJ divided by efficiency of steam generator multiplied by emission factor of natural gas taken as IPCC default values at the lower limit of the uncertainty at a 95% confidence interval.

For calculation of the emission factor of Turkish Grid, the latest official emission factor of Turkey published by the Ministry of Energy and Natural Resources has been referred. The document refers to calculation of the grid emission factor based on the "Tool to Calculate the Emission Factor for an Electricity System, version 6". Although, the latest version of the grid emission factor tool is version 7.0, however the change in the version related to isolated grid does not make any impact in this case and it being the latest official publication has therefore been accepted by the DOE.

Option A: A combined margin (CM), consisting of the combination of operating margin (OM) and build margin (BM) is calculated according to the procedures prescribed in the 'Tool to calculate the emission factor for an electricity system'.

The OM is calculated as 0.7258 tCO2/MWh.

The BM is calculated as 0.4153 tCO2/MWh.

The combined margin emissions factor has been calculated using the default values of 0.5 and 0.5 for OM and BM respectively. The CM is calculated as 0.5706 tCO2/MWh.

The project emissions are calculated correspondingly for physical leakage of biogas from digesters, flaring, electricity consumption and transportation of manure from farms to the site. Apportioning based on the registered capacity during the first CP and the currently installed capacity has been applied. The approach is deemed acceptable to the DOE.

There are no leakage emissions associated with the project. Thus, the emission reductions correspond to the baseline emissions minus the project emissions. The project is expected to result in an average emission reduction of 114,851 tCO2/year during the first renewable crediting period.

The double counting issue has also been assessed and the validation team has also checked the I-REC Registry (https://evident.services/device-register) wherein in total 319 projects from Turkey are listed as of this validation report date and this project is not 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 is not 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, VCS and GCC registries, it could be confirmed that no RECs and other VER carbon credits are being issued for the project.

4.10. Safeguarding Principles

The project participants have carried out an analysis of the social, economic and environmental impacts following the GS4GG Safeguarding Principles and Requirements. All the safeguarding principles are stated, and all the relevant assessment questions included pertaining to the safeguarding principles. No mitigation measures are required for any of the Safeguarding Principles. However,

- for the safeguarding principle 5, Turkey has ratified several conventions on bribery and corruption including OECD and UN conventions[1]
- for the safeguarding principle 6.1, the training records of the employees and fair wage, working hours and occupational injuries will be monitored.
- for the safeguarding principle 9.4, the leachate water will be monitored.
- for the safeguarding principle 9.5 the waste oil disposal will be monitored.
- for the safeguarding principle 9.6, fertilizer distributed to local farmers for agricultural use will be monitored.

Since the project is an animal waste management system linked biogas-based heat and power project, it is validated based on interviews held remotely, document reviews and expertise of the audit team that based on the non-relevance of the assessment questions, no mitigation measures have been adopted, which are deemed appropriate. Employment opportunities have emerged with the coming of the project activity, and the employees are trained about health and safety issues too. The same has been validated during the remote discussions with the relevant local stakeholders. These findings are also in line with the findings of the local stakeholder consultations and have been correctly presented in the PDD. The payrolls of the PP site employees have also been provided to DOE. Besides that, there hadn't been any complaint by the interviewed employees during the remote audit, either.

Therefore, through document review and interview held remotely, Re Carbon Ltd. confirms that the safeguarding principles assessment has been appropriately conducted for the project activity.

4.11. Local Stakeholder Comments

Local Stakeholder Consultation for SÜTAS Tire Biogas Plant Project was conducted on 19/01/2016 in Tire Industrial Zone Meeting Hall. During the local stakeholder consultation, introduction of the project, Climate Change and Certification Process, Sustainability Assessment, Question and Answers, Evaluation and feedback session took place to inform the local stakeholders and take their comments on the project activity. In the “Question and Answers” part of the consultation, there was no question asked by the local stakeholders about the project activity. So, there are no negative comment taken during the consultation. The camera records were also used for the local stakeholders who do not have easy access to the process book. Local stakeholders have easy access to the project owner via phone call or e-

[1] http://www.masak.gov.tr/en/LaunderingProceedsofCrime/Chronology.htm

mail. In short, the Stakeholder Consultation Report for a complete report on the initial consultation and stakeholder feedback round has been provided to the VVB and there are no negative comments or situations during the consultation.

Due to travel restrictions owing to COVID-19, on-site visits have not been conducted for the crediting period renewal validation. However, remote interactions with the some of the local stakeholders were conducted on 04/10/2021 and there hadn't been any complaint by the interviewed local stakeholders during the interviews held.

Further, regarding the stakeholder feedback round (SFR), though the project developer (PD) has submitted evidence of presentation, however the evidence is not robust enough to verify all the required details, a FAR has thus been raised. The PD should re-conduct the SFR before the 1st issuance.

4.12. Global Stakeholder Consultation

4.12.1. Description of how the PDD is made publicly available

Not applicable.

4.12.2. Compilation of comments received

Not applicable.

4.12.3. Explanation of how comments are taken into account

Not applicable.

4.12.4. Summary on comments by parties, stakeholders and NGOs

Not applicable.

4.13. Sampling Plan

Not applicable.

4.14. Sustainable Development

Apart from contributing towards 'SDG#13: Climate Action' assessed through the application of the methodology ACM0010, by collection and use of methane for energy generation and displacing fossil fuel-based grid electricity, the project is stated to contribute directly to achieving 'SDG#7: Affordable and clean energy' being a renewable electricity generation project; 'SDG#8: Decent work and economic growth' through employment generation and trainings; and 'SDG#12: Sustainable Consumption and Production' through better waste management. The aforesaid contributions have been assessed based on the electricity generation licence, social security records and interviews conducted with the local stakeholders.

Therefore, through document review and interview held remotely, Re Carbon Ltd. confirms that the contributions towards the SDGs have been appropriately cited for the project activity.

5. LIST OF PERSONS INTERVIEWED

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

Table 5-1: List of persons interviewed

Reference Number	Means of Interview [2]	Full Name	Title	Organization
I01	SV	Ali ASLAN	Purchasing Chief	Enfaş Elektrik Üretim A.Ş.
I02	SV	Serkan ANACAK	Project and R&D Manager	Enfaş Elektrik Üretim A.Ş.
I03	SV	Miray TUĞ	Environmental Manager	Enfaş Elektrik Üretim A.Ş.
I04	SV	Ecem ÖZDEMİR	Environmental Specialist	Enfaş Elektrik Üretim A.Ş.
I05	SV	Sandeep KANDA	Team Leader	Re Carbon Ltd.
I06	SV	Fikriye Seda ATABEK	Validator	Re Carbon Ltd.
I07	SV	Engin KOÇ	Carbon Consultant	GTE Carbon Ltd.
I08	SV	Ahmet ÇELİK	Local Stakeholder	Tire District

[2] 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 the Table 6-1 below:

Table 6-1: List of documents reviewed

Document Number	Document Name	Version	Date (dd/mm/yyyy)
D01	PDD	01 02 03 04	30/09/2021 10/11/2021 14/11/2021 16/11/2021
D02	PDD	04	16/11/2021
D03	ER Calculation Spreadsheet	01 02 03 04	30/09/2021 10/11/2021 14/11/2021 16/11/2021
D04	Common Practice Analysis	01	23/09/2020
D05	IRR Calculations	01	14/10/2020 16/11/2021
D06	Validation Service Agreement	-	28/12/2020
D07	CDM Validation and Verification Standard for Project Activities	3.0	09/09/2021
D08	CDM Project Standard for Project Activities	3.0	09/09/2021
D09	CDM Project Cycle Procedure for Project Activities	3.0	09/09/2021
D10	Gold Standard for Global Goals	1.2	-
D11	The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reduction from Manure Management Systems and Municipal Solid Waste (ACM0010, Version 7.0)	-	12/2013
D12	TOOL02: Combined tool to identify the baseline scenario and demonstrate additionality	07	22/09/2017
D13	TOOL03: Tool to calculate project or leakage CO2 emissions from fossil fuel combustion	03	22/09/2017
D14	TOOL04: Emissions from solid waste disposal sites	08	04/05/2017
D15	TOOL05: Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation	03	22/09/2017
D16	TOOL06: Project emissions from flaring	03	28/03/2019
D17	TOOL07: Tool to Calculate the Emission Factor for an	07	31/08/2018

Document Number	Document Name	Version	Date (dd/mm/yyyy)
	Electricity System		
D18	TOOL08: Tool to determine the mass flow of a greenhouse gas in a gaseous stream	03	27/11/2015
D19	TOOL14: Project and leakage emissions from anaerobic digesters	02	22/09/2017
D20	Enfaş-GEJ Tire Contract	-	29/12/2015
D21	Tire Biogas License	-	01/09/2016
D22	ENFAŞ Tire Biyogaz Şubesi Kapasite Raporu 14.11.2020	-	14/11/2018
D23	Approved Agreement_GE Jenbacher_The average of 4 gas engines and other equipment	-	29/12/2015
D24	APPROVED AGREEMENT_Joint Construction Contract of Milk Factory and Biogas Plant	-	02/12/2014
D25	Brand Photos of Gas Engine and Heat Boiler and Flare Unit	-	-
D26	Monthly Steam Transfer Data from heat boilers to dairy factory_signed	-	-
D27	Site Photos of Gas Engines and Heat Boilers and Flare Unit	-	-
D28	Truck Photos for Manure Transportation	-	-
D29	Animal Farm Agreements which include Animal Number_Tire Biogas Project	-	06/10/2021; 07/10/2021
D30	Enfa___T__RE_biogas_LSC_v.02_29.06.2016	02	29/06/2016
D31	GS4817__LSC_Review_final_04082017	-	04/08/2017
D32	Local Stakeholder Decleration on Tire Biogas Project_Ismail ESEROL	-	-
D33	Local Stakeholder Decleration on Tire Biogas Project_Mehmet SENTÜRK	-	-
D34	Local Stakeholder Decleration on Tire Biogas Project_Muharrem SENKAL	-	-
D35	Local Stakeholder Decleration on Tire Biogas Project_Sefa ÖZAY	-	-
D36	Technical Description Document of Gas Engines	-	-
D37	Technical Description Document of Heat Boilers (all are same)	-	-
D38	Tire Biogas Project_Declaration that waste is kept for less than 24 hours	-	11/10/2021
D39	Tire Biogas Project_Decleration on VERs of the Project	-	11/10/2021
D40	Tire Biogas Project_Provisional acceptance Protocol	-	14/10/2016

Document Number	Document Name	Version	Date (dd/mm/yyyy)
D41	TIRE SUTAS BIYOGAZ ON FIZIBILITE_NIHAI CD	-	10/2016
D42	TÜRKİYE ULUSAL ELEKTRİK ŞEBEKESİ_emisyon faktörü_2019	00	06/10/2021
D43	Declaration of CERs of the Project_GTE	-	16/11/2021
D44	Land Cost_Tire Project	-	31/10/2021
D45	PDD	05	09/03/2023
D46	ER Calculation Spreadsheet	05	23/11/2022
D47	IRR Calculations	02	23/11/2022
D48	The Role of Institutional Investors in Financing Clean Energy	-	2012
D49	PDD	06	05/07/2023
D50	GTE _ENFAS_amendment agreement_21.01.2019_based on Tire_Aksaray and Karacabey Biogas Projects	-	21/01/2019
D51	GTE Carbon Trading Mail - Basedon invoices for Tire, Aksaray and Karacabey Biogas Plant_25.12.2019	-	25/12/2019
D52	Signed_Agreement with VVB_622 Tire biogas_22_06_2020	-	22/06/2020
D53	PDD	07	12/02/2024
D54	PDD	08	18/04/2024
D55	LSC sunum tire v2	-	19/01/2016

7. VALIDATION TEAM AND ITR COMPETENCE

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

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

Seza DANISOGLU holds a B.Sc. degree in Management from Middle East Technical University in Ankara, Turkey. She also has M.Sc. in Business Statistics and Ph.D. in Finance degrees from Texas Tech University in Lubbock, Texas, USA. She is employed as an assistant professor of finance at the Middle East Technical University. She conducts academic research in the areas of investments and banking, teaches courses in Financial Management, Financial Derivatives and Microeconomics and is also employed as a visiting professor by the Texas Tech University during summer semesters. She has been working as a contracted financial expert in the context of Re Carbon.

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

Rohit Badaya holds Masters degree (M. Tech) in Nanotechnology and Bachelors degree (B.Tech) in Pulp and Paper Engineering from Indian Institute of Technology Roorkee (IITRoorkee).Heis also a Certified Energy Auditor from the Bureau of Energy Efficiency, Ministryof Power,Govt. ofIndia. He has more than 13 years of work experience in the areaofClimate Change(CDM,GS, VCS).He has worked in various DOE/VVBs in past including 'TUVNord', 'PJRCES Inc' and 'KBS Certification Services Private Limited'. During his work experience, he has worked in the capacity of Team Leader, Validator/Verifier, Technical Expert, Technical Reviewer, Manager (Technical & Certification) and Quality Manager. He has worked as a Technical Expert for the Technical Areas–TA 1.1 (Thermal energy generationfrom fossil fuels and biomass including thermal electricity from solar), TA 1.2 (Energygeneration from renewable energy sources), TA 2.1 (Energy Distribution), TA 3.1 (EnergyDemand), TA 13.1 (Waste Handling and Disposal), TA 13.2 (Manure) for the CDM/GS/VCSprojects. He has worked on more than 200 projects asTeamLeader/Validator/Verifier/Technical Expert/Technical Reviewer. He is well versed with the various local regulations related to the CDM/GS/VCS projects located in thecountries of Africa, Asia and Turkey. He has been working as a contracted team leader, technical expert and technical reviewer in the context of Re Carbon.

7.1. Appointment Certificates

Re Carbon Gözetim Denetim ve Belgelendirme Ltd. Şti. Prof. Dr. Aziz Sancar Cad. 27/5 TR / 06690 Çankaya-Ankara Tel.: 0090-312-287 5122 Fax: 0090-312-287 3373	Certificate of Appointment Carbon Division	re-carbon Page: 1/1

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

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

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

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

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

1. Participate in the assessments conducted by Re Carbon Ltd.
2. Take the roles within and outside of the assessment team
3. Bring specific expertise to the assessments

This Certificate of Appointment is valid unless there are changes in the related requirements for the qualification and appointment and/or the personnel's work agreement is terminated and there is no defined validity period for this Certificate.

However, The Certificate may be updated, suspended or cancelled at any time, as a result of the performance assessments and/or other reasons as defined above.

APPOINTMENT IS GRANTED BY			
Mr. Anıl SÖYLER	Certification Manager	08-02-2021	
Name	Position	Date	Signature

F-C451 / 11.03.2021 - 01

Re Carbon Cozetim Denetim ve Belgelendirme Ltd. Şti.
Bagi's Plaza
Muhsin Yazicioglu Cad. 43/11
TR / 06520 Beloet-Ankara
Tel.: 0090-312-287 5122
Fax: 0090 312 287 3373

Certificate of Appointment

Carbon Division

Page: 1/1

This Certificate of Appointment is given to **Ms. Seza DANIŞOĞLU** as a confirmation of compliance with internal qualification requirements as follows

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

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

Speciality	Regional expertise	Financial expertise	Technical area
Finance	Worldwide	05-05-2017	N/A

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

1. Participate in the assessments conducted by Re Carbon Ltd.
2. Take the roles within and outside of the assessment team
3. Bring specific expertise to the assessments

This Certificate of Appointment is valid unless there are changes in the related requirements for the qualification and appointment and/or the personnel's work agreement is terminated and there is no defined validity period for this Certificate.

However, The Certificate may be updated, suspended or cancelled at any time, as a result of the performance assessments and/or other reasons as defined above.

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

Re Carbon Gözetim Denetim ve Belgelendirme Ltd. Şti.
Prof. Dr. Aziz Sancar Cad. 27/6
TR / 06830 Çankaya-Ankara
Tel.: 0090-312-287 6122
Fax: 0090-312-287 3373

Certificate of Appointment

Carbon Division

Page: 1/1

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

Clean Development Mechanism				
Validator	Verifier	Team leader	Technical reviewer	Technical Expert
08-02-2021	08-02-2021	N/A	N/A	08-02-2021

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

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

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

1. Participate in the assessments conducted by Re Carbon Ltd.
2. Take the roles within and outside of the assessment team
3. Bring specific expertise to the assessments

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However, The Certificate may be updated, suspended or cancelled at any time, as a result of the performance assessments and/or other reasons as defined above.

APPOINTMENT IS GRANTED BY			
Mr. Anıl SÖYLER	Certification Manager	08-02-2021	
Name	Position	Date	Signature

Re Carbon Gözetim Denetim ve Belgelendirme Ltd. Şti.
Prof. Dr. Aziz Sancar Cad. 27/6
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Certificate of Appointment

Carbon Division

Page: 1/1

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

Clean Development Mechanism				
Validator	Verifier	Team leader	Technical reviewer	Technical Expert
08-02-2021	08-02-2021	N/A	N/A	08-02-2021

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

Speciality	Regional (Country) expertise	Financial expertise	Technical area
N/A	Turkey	N/A	1.2 and 13.1

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

1. Participate in the assessments conducted by Re Carbon Ltd.
2. Take the roles within and outside of the assessment team
3. Bring specific expertise to the assessments

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However, The Certificate may be updated, suspended or cancelled at any time as a result of the performance assessments and/or other reasons as defined above.

APPOINTMENT IS GRANTED BY			
Mr. Christian JOHANNES	General Manager	08-02-2021	
Name	Position	Date	Signature

Re Carbon Özellik Denetim ve Belgelendirme Ltd. Şti.
Prof. Dr. Aziz Sancar Cad.
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Certificate of Appointment

Carbon Division

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

Clean Development Mechanism				
Validator	Verifier	Team leader	Technical reviewer	Technical Expert
25-10-2021	25-10-2021	25-10-2021	25-10-2021	25-10-2021

Verified Carbon Standard, Gold Standard, World Commission on Dams, Social Carbon				
Validator	Verifier	Team leader	Technical reviewer	Technical Expert
25-10-2021	25-10-2021	25-10-2021	25-10-2021	25-10-2021

Speciality	Regional (Country) expertise	Financial expertise	Technical area
N/A	India and Turkey	N/A	1.1, 1.2, 2.1, 3.1, 13.1 & 13.2

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

1. Participate in the assessments conducted by Re Carbon Ltd.
2. Take the roles within and outside of the assessment team
3. Bring specific expertise to the assessments

This Certificate of Appointment is valid unless there are changes in the related requirements for the qualification and appointment and/or the personnel's work agreement is terminated and there is no defined validity period for this Certificate.

However, the Certificate may be updated, suspended or cancelled at any time, as a result of the performance assessments and/or other reasons as defined above.

APPOINTMENT IS GRANTED BY			
Mr. Anıl SOYLER	Certification Manager	25-10-2021	
Name	Position	Date	Signature

8. VALIDATION OPINION

Re Carbon Ltd. has performed the validation of the “SUTAS Tire Biogas Plant” in “Turkey” between 01/10/2021 and 14/05/2024. The validation was performed on the basis of UNFCCC criteria for the CDM, GS 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 “Sandeep Kanda as team leader, Fikriye Seda Atabek as validator, Seza Danışoğlu as financial expert, Anıl Söyler as trainee ITR and Rohit Badaya as ITR”, and the project activity was checked against the applicable rules and regulations of CDM including CDM Validation and Verification Standard version 3.0, CDM Project Standard for project activities, version 3.0, and CDM Project Cycle Procedure for project activities, version 3.0, and Gold Standard for Global Goals version 1.2.

Project’s validated PDD, ERs calculation sheet, validation report and other relevant documents uploaded to sustain cert on 21/11/2021 under GS4GG templates.

Re Carbon Ltd. hereby confirms that the proposed project activity “SUTAS Tire Biogas Plant” in Turkey, has applied all relevant EB-guidance as the selected baseline and monitoring methodologies and the associated methodological tools have been applied correctly. Total emission reductions from the project are estimated to be on average 114,851 tCO_2e per year over the selected 05 year crediting period. The emission reduction forecast has been checked and it is deemed likely that the stated amount is achieved given that the underlying assumptions do not change.

As a result, the validation team assigned by the Re Carbon Ltd. concludes that the proposed Project Activity “SUTAS Tire Biogas Plant” in Turkey, as described in the PDD (version 08, dated 18/04/2024)

- meets all relevant Host Country criteria;
- meets all relevant requirements of the GS, 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 ACM0010, Version 07;
- its additionality is sufficiently justified in the PDD;
- is likely to achieve estimated emission reductions;

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

Sandeep KANDA	Rohit BADAYA	Anıl SÖYLER
Team Leader	ITR	Certification Manager
04/06/2024	04/06/2024	04/06/2024

ANNEX 1: VALIDATION PROTOCOL

Table 1 – Gold Standard and CDM Validation Requirements

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

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	Please refer below	Ok	Ok
1.1. GS ID of the project activity	GS-PDD-FORM Ver. 1.2	DR	GS ID: GS 4817	Ok	Ok
1.2. Title of the project activity	GS-PDD-FORM Ver. 1.2	DR	SUTAS Tire Biogas Plant	Ok	Ok
1.3. Time of first submission date	GS-PDD-FORM Ver. 1.2	DR	n/a	Ok	Ok
1.4. Date of design certification	GS-PDD-FORM Ver. 1.2	DR	n/a	Ok	Ok
1.5. Version number of the PDD	GS-PDD-FORM Ver. 1.2	DR	Version indicated in the first submission is 01	Ok	Ok
1.6. Completion date of version	GS-PDD-FORM Ver. 1.2	DR	Completion date indicated in the first submission as 30/09/2021.	Ok	Ok
1.7. Project developer	GS-PDD-FORM Ver. 1.2	DR	GTE KARBON SUSTAINABLE ENERJI EGITIM DANISMANLIK VE TICARET A.S.	Ok	Ok
1.8. Project representative	GS-PDD-FORM Ver. 1.2	DR	GTE KARBON SUSTAINABLE ENERJI EGITIM DANISMANLIK VE TICARET A.S.	Ok	Ok
1.9. Project participants and any communities involved	GS-PDD-FORM Ver. 1.2	DR	ENFAŞ ENERJİ ELEKTRİK ÜRETİM A.Ş. (Project Owner, Private Entity)	Ok	Ok
1.10. Host country (ies)	GS-PDD-FORM	DR	Turkey	Ok	Ok

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	Ver. 1.2				
1.11. Activity requirements applied	GS-PDD-FORM Ver. 1.2	DR	Renewable Energy Activities	Ok	Ok
1.12. Scale of the project activity	GS-PDD-FORM Ver. 1.2	DR	Large scale	Ok	Ok
1.13. Other requirements applied	GS-PDD-FORM Ver. 1.2	DR	n/a	Ok	Ok
1.14. Methodology (ies) applied and version number	GS-PDD-FORM Ver. 1.2	DR	The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reduction from Manure Management Systems and Municipal Solid Waste.	Ok	Ok
1.15. Product requirements applied	GS-PDD-FORM Ver. 1.2	DR	Please clarify why 'GHG Emissions Reduction & Sequestration' as well as 'N/A' has been checked.	CAR-1	Ok
1.16. Project cycle	GS-PDD-FORM Ver. 1.2	DR	Please clarify the basis of indicating the project cycle as 'Regular'.	CAR-2	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	Yes, contributions to SDG7, SDG8, SDG12 and SDG13 is indicated in the tabular format.	Ok	Ok
A. Description of Project					
A.1. **Purpose and general description of project**					
A.1.1. 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	The project is indicated as a cogeneration project using biogas generated from cattle manure, chicken manure and agricultural wastes -via anaerobic digestion. The electricity would be exported to the Turkish national grid. It is indicated that the project activity reduces GHG emissions released from the anaerobic decay of organic waste.	CAR-3	Ok

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
			Please indicate the scenario existing prior to the implementation of the project activity about the referred organic wastes such as chicken manure and agricultural wastes collected from neighbouring waste sources and electricity export to grid too. Also, clarify about the greenfield dairy unit along with the biogas facility. Further, the quantum of waste being treated is also to be indicated.		
A.1.2. Is the baseline scenario described as identified in section B4 of the PDD?	GS-PDD-FORM Ver. 1.2	DR	It is indicated that in the baseline scenario manure from the farms were being left to decay in anaerobic lagoons or spread over the fields. However, baseline scenario for other waste types is not clarified. Please indicate the baseline scenario about the referred organic wastes such as chicken manure and agricultural wastes and electricity export to grid too.	CAR-4	Ok
A.1.3. Has the PPs provided an estimation of annual average and total GHG emission reductions for the chosen crediting period?	GS-PDD-FORM Ver. 1.2	DR	The project's estimated amount of CO2 reduction per annum and total GHG emission reductions for the chosen crediting period are indicated.	Ok	Ok
A.1.4. 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 EB 101 Report Annex 1 §36c	DR	Please indicate briefly as to how the project contributes to the sustainable development of the Host Party. Please submit the LSC meeting dated 19/01/2016, EIA report dated 23/08/2017 among other documents including the GS review documents.	CAR-5, CL-1	Ok
A.1.1. **Eligibility of the project under Gold Standard**					
A.1.1.1. Is it described how the project meets the eligibility criteria as per section 3.1.1 of GS4GG Principles &	GS-PDD-FORM Ver. 1.2	DR	Yes, the eligibility criteria as per section 3.1.1 of GS4GG Principles & Requirements is described and the project meets such criteria.	CAR-6	Ok

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
Requirements documents and the relevant activity requirements document?			Please clarify and correct the statement in section A.1.1 of the PDD wherein it is indicated that, 'This is the second crediting period of the project…'. Also, the reference to GS4GG version 1.1 is to be updated.		
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	The project participant ENFAŞ Enerji Elektrik Üretim Sanayi ve Ticaret A.Ş. is the legal owner of the project, as also checked from the electricity generation licence issued.	Ok	Ok
A.2. **Location of the project activity**					
A.2.1. Is the location of the project activity clearly identified including:	GS-PDD-FORM Ver. 1.2	DR	The location of the project activity as stated in the PDD is confirmed from the generation licence issued to ENFAŞ Enerji Elektrik Üretim Sanayi ve Ticaret A.Ş. by EPDK (Energy Market Regulatory Authority) dated 01/09/2016.	Ok	Ok
A.2.1.1. Host Party(ies)?	GS-PDD-FORM Ver. 1.2	DR	Turkey	Ok	Ok
A.2.1.2. Region/State/Province etc.	GS-PDD-FORM Ver. 1.2	DR	İZMİR Province	Ok	Ok
A.2.1.3. City/Town/Community etc.	GS-PDD-FORM	DR	Tire District	Ok	Ok

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	Ver. 1.2				
A.2.1.4. Street name and number	GS-PDD-FORM Ver. 1.2	DR	The coordinates of the project area are given and the same could be confirmed with the EPDK licence too.	Ok	Ok
A.2.1.5. A map	GS-PDD-FORM Ver. 1.2	DR	The map of the project areas is provided.	Ok	Ok
A.2.1.6. Details of physical location, including information allowing the unique identification of the project activity (e.g. geographic coordinates).	GS-PDD-FORM Ver. 1.2	DR	Please clarify and correct the stated coordinates of the project area as the same could not be confirmed with the EPDK licence.	CAR-7	Ok
A.3. **Technologies and/or measures**					
A.3.1. Does PDD include the accurate and complete description of the proposed project activity and provide an understanding of the proposed GS project activity?	EB 101 Report Annex 1 §35	DR	The details about the technology being implemented as part of the project including the technical description of the key equipment is to be provided. Please clarify about the anaerobic digestors too and provide the corresponding supporting documents for the equipment too.	CAR-8	Ok
A.3.2. Is the proposed GS project activity in existing facilities or utilizing existing equipment?	EB 101 Report Annex 2 §51	DR	Please confirm that the project activity is a greenfield project, however, is also utilizing waste from other existing farms too.	CAR-9	Ok
A.3.3. Does the proposed GS project activity involve the alteration of an existing installation or process?	EB 101 Report Annex 2 §51	DR	Please clarify on the process of waste management for chicken manure and agricultural wastes existing prior to the project activity. Also, indicate the quantity of respective waste type that would likely be treated at the facility.	CAR-10	Ok
A.3.4. If the proposed GS project activity is the alteration of an existing installation or process, does the project description clearly state the differences resulting from the project activity	EB 101 Report Annex 2 §51	DR	Refer to CAR above	CAR-9	Ok

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
compared to the pre-project situation?					
A.3.5. Have the technologies and measures to be employed and/or implemented by the project activity been described including a list of facilities, systems and equipment that will be installed and/or modified by the project activity?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR-8	Ok
A.3.6. Has the PP provided a list of facilities, systems and equipment in operation under the existing scenario prior to the implementation of the project activity?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR-8, CAR-9	Ok
A.3.7. Has the PP provided a list of facilities, systems and equipment in the baseline scenario, as established in section B.4 of the PDD?	GS-PDD-FORM Ver. 1.2	DR	Please provide the list of facilities, systems and equipment in the baseline scenario, as subsequently established in section B.4 of the PDD.	CAR-11	Ok
A.3.8. Does the description clearly explain how the same types and levels of services provided by the project activity would have been provided in the baseline scenario?	GS-PDD-FORM Ver. 1.2 EB 101 Report Annex 1 §60	DR	Please clearly explain how the same types and levels of services provided by the project activity would have been provided in the baseline scenario.	CAR-12	Ok
A.3.9. Has the PPs included information about the age and average lifetime of the equipment based on manufacturer's specifications and industry standards, and existing and forecast installed capacities, load factors and efficiencies, under section A.3 of the PDD?	GS-PDD-FORM Ver. 1.2 EB 101 Report Annex 1 §36e-iv	DR	Please include information about the age and average lifetime of the equipment based on manufacturer's specifications and industry standards, and existing and forecast installed capacities, load factors and efficiencies.	CAR-13	Ok
A.3.10. Is the information provided as to how the project contributes positively to three SDGs?	GS-PDD-FORM Ver. 1.2	DR	Please indicate as to how the project contributes towards SDG 7, SDG 8, SDG 12 and SDG 13.	CAR-14	Ok

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
A.3.11. Has the energy and mass flows and balances of the systems and equipment included in the project activity, been given?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR-8-13	Ok
A.3.12. Has the types and levels of services (normally in terms of mass or energy flows) provided by the systems and equipment that are being modified and/or installed under the project activity and their relation, if any, to other manufacturing/production equipment and systems outside the project boundary, been given?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR-8-13	Ok
A.3.13. Has the PPs described the technology to be employed by the project activity to enable the identification of the following:	EB 101 Report Annex 1 §36	DR	Yes	Ok	Ok
A.3.13.1. Project's title	EB 101 Report Annex 1 §36a	DR	Yes	Ok	Ok
A.3.13.2. Project's sectoral scope	EB 101 Report Annex 1 §36b	DR	Yes	Ok	Ok
A.3.13.3. Know-how to be used are transferred to the host Party(ies)	EB 101 Report Annex 1 §36e	DR	Yes	Ok	Ok
A.4. **Scale of the project**					

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
A.4.1. Has the scale of the project defined (micro scale, small scale or others)?	GS-PDD-FORM Ver. 1.2	DR	Large scale	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	Please correct the statement '…estimated emission reduction of the proposed project activity is 83,898 tCO2 equivalent per year…'. The value is inconsistent with other parts of the PDD.	CAR-15	Ok
A.5. **Funding source of project**					
A.5.1. Is the source of public and private funding sources for the project provided?	GS-PDD-FORM Ver. 1.2	DR	It is indicated that no public funding is used for the project activity. Please submit the documentary evidence for the project funding.	CL-2	Ok
A.5.2. If the project activity receives public funding, has the PP provided information on Parties providing the public funding?	GS-PDD-FORM Ver. 1.2	DR	N/A	Ok	Ok
A.5.3. If the project activity receives public funding, has the PP attached in Appendix 2 of the PDD an affirmation obtained from Parties included in Appendix 1 that such funding does not result in a diversion of Official Development Assistance (ODA), is separate from, and is not counted towards the financial obligations of those Parties?	GS-PDD-FORM Ver. 1.2 EB 101 Report Annex 1 §38	DR	N/A	Ok	Ok
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	GS-PDD-FORM	DR	'The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reductions from Manure	Ok	Ok

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
methodology(ies) given in the PDD?	Ver. 1.2		Management Systems and Municipal Solid Waste' has been referenced.		
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) refer given in the PDD?	GS-PDD-FORM Ver. 1.2 EB 101 Report Annex 1 §54	DR	Please indicate only the relevant and applied tools. The reference to the tool 'Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period' is inappropriate too. Further, the additionality and baseline related tools 'Combined tool to identify the baseline scenario and demonstrate additionality', transportation of waste among others are missing.	CAR-16	Ok
B.2. **Applicability of methodology(ies)**					
B.2.1. Has the PPs 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 EB 101 Report Annex 1 §54 EB 101 Report Annex 2 §67	DR	Yes, the applicability conditions as per the methodology along with the justification is stated. However, the justification provided is insufficient / incomplete. Refer to CAR, CL below.	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?	EB 101 Report Annex 2 §67	DR	Refer to CAR, CL below	CAR, CL	Ok
B.2.3. Has the PPs explained the documentation that has been used and provided the references to applicability of methodology?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR, CL below	CAR, CL	Ok
The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission					

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
Reductions from Manure Management Systems and Municipal Solid Waste					
B.2.4. Does the proposed project activity involve the following?	MMS & MSW version 1.0	DR	Refer to CAR below	CAR, CL	Ok
B.2.4.1. 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	It is indicated that '' The proposed project activity is a Greenfield project which consists of treatment of animal manure via anaerobic digestion collected from neighbouring farms and organic wastes from nearby facilities to produce methane through utilizing biogas for electricity generation.' However, the justification to the applicability condition does not indicate about the existing anaerobic manure treatment system. Please clearly indicate about the clause '..multiple organic matters that would have otherwise been left to decay anaerobically in an animal waste management system (AWMS) or a solid waste disposal site (SWDS)'. Also, associated supporting documentary evidence are to be provided.	CAR-17	Ok
B.2.5. Does the proposed project activity involve manure management project under the following conditions? In addition	MMS & MSW version 1.0	DR	Refer to CAR, CL below	CAR, CL	Ok
B.2.5.1. 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	It has been indicated that the management of livestock populations are to follow Turkish Law and Regulations with the section ''Regulation of Establishment, Execution and Supervision of Livestock Facilities''[3] Please provide documentary evidence that the farms are in compliance with the regulations and also submit the	CL-3	Ok

[3] https://www.resmigazete.gov.tr/eskiler/2006/08/20060809-4.htm

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
			agreement(s) with the farms and Enfas.		
B.2.5.2. Farms where manure is not discharged into natural water resources (e.g. rivers or estuaries);	MMS & MSW version 1.0	DR	Please clarify and correct the applicability condition as the methodology only indicates 'Farms where manure is not discharged into natural water resources (e.g. rivers or estuaries);'. Further, provide documentary evidence to confirm that manure is not discharged into natural water resources from the farms.	CAR-18	Ok
B.2.5.3. 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	Please provide documentary evidence to confirm that in the baseline scenario cattle manure generated at farms is stored generally in tanks in anaerobic conditions. Tanks' depths, when applicable, are more than 1 m.	CL-4	Ok
B.2.5.4. 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	The link to the government meteorological website confirms that the average ambient temperature at the baseline site is higher than 5°C.	Ok	Ok
B.2.5.5. 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	Please provide documentary evidence to confirm that in the baseline scenario the retention time of manure waste is greater than one month in the baseline scenario.	CL-5	Ok
B.2.5.6. 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	Please provide documentary evidence to confirm that in the project case there is no leakage of manure waste into ground water, e.g. the lagoon should have a non-permeable layer at the lagoon bottom	CL-6	Ok
B.2.5.7. If residues are stored in between collection activities, storage tanks shall comprise outdoor open equipments;	MMS & MSW version 1.0	DR	Not applicable	Ok	Ok
B.2.5.8. 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	It is indicated that the end use of the manure/treated residue remains the same as fertilizer use. The same has also been confirmed during local stakeholder interviews.	Ok	Ok

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
use remains the same throughout the project activity;					
B.2.5.9. 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	Not applicable	Ok	Ok
B.2.5.10.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	It is indicated that other organic waste emissions besides manure are counted as zero in the emission reduction calculations.	Ok	Ok
B.2.5.11.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	It is indicated that Declarations will be provided during validation to DOE. Please provide the declaration that the VERs shall be claimed by Enfas only. Also, correct the statement in the PDD.	CAR-19	Ok
B.2.5.12.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	Not applicable	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 PP described the emission sources and GHGs included in the project boundary for the purpose of calculating project emissions and baseline emissions, in the tabular format?	GS-PDD-FORM Ver. 1.2	DR	Yes	Ok	Ok
B.3.2. Has the PP 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	Please present a flow diagram of the project boundary, physically delineating the project activity.	CAR-20	Ok
B.3.3. Has the PP 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	Please include a flow diagram also depciting the equipment, systems and the emission sources and GHGs included in the project boundary and the data and parameters to be monitored.	CAR-21	Ok
B.3.4. Does the selected methodology allow the PPs to choose whether a source or gas is to be included in the project boundary?	EB 101 Report Annex 1 §58	DR	Yes	Ok	Ok
B.3.5. If the selected methodology allows the project participants to choose whether a source or gas is to be included in the project boundary, do the project participants explain and justify their choices?	EB 101 Report Annex 1 §58	DR	Yes	Ok	Ok
B.3.6. Have all sources and GHGs necessary for the calculation of emissions been included within the project boundary?	EB 101 Report Annex 2 §69	DR	Yes	Ok	Ok
B.3.7. Does the PDD correctly describe the project boundary and the physical delineation of the proposed project activity?	EB 101 Report Annex 1 §57	DR	Yes	Ok	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.3.8. Has the selected methodology been correctly applied with respect to project boundary?	EB 101 Report Annex 2 §63a	DR	Yes	Ok	Ok
The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste					
B.3.9. Does the spatial extent of the project boundary include the following as applicable?	MMS & MSW version 1.0	DR	It is indicated that the boundary of the proposed project activity encompasses the physical and geographical sites of the waste producers which are designated cattle farms, yeast production facility and frozen vegetable production facility. Boundary also encompasses the biogas production plant and the farms and facilities where the solid and liquid fraction(slurry) of the organic fertilizers transferred to. The inclusion of the onsite flare or energy is not indicated though. Please also correctly present the table depicting the Emissions sources included in or excluded from the project boundary, as per the methodology.	CAR-22	Ok
B.3.9.1. The site of the AWMS(s)) and /or solid waste disposal site (if applicable),	MMS & MSW version 1.0	DR	Yes	Ok	Ok
B.3.9.2. Treatment facility and/ or central treatment facility including the storage tanks (if applicable)	MMS & MSW version 1.0	DR	Yes	Ok	Ok
B.3.9.3. 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	MMS & MSW version 1.0	DR	Yes	Ok	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
thermally/mechanically					
B.3.9.4. Onsite flare or energy and/or heat generation equipment and the power/heat source	MMS & MSW version 1.0	DR	Refer to CAR above	CAR-22	Ok
B.3.9.5. The road itineraries and/or piping system between the manure collection points	MMS & MSW version 1.0	DR	Please provide the documentary evidence for the designated farms and facilities wherefrom the organic waste is collected, also confirming the road itineraries.	CAR-23	Ok
B.3.9.6. Waste/ residue transportation (if applicable),	MMS & MSW version 1.0	DR	Refer to CAR above	CAR-23	Ok
B.3.9.7. The central treatment plant and sold waste disposal site (if applicable)	MMS & MSW version 1.0	DR	Yes	Ok	Ok
B.3.10. 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	Yes	Ok	Ok
B.3.11. Has the clear diagrammatic representation of the project scenario been provided by PP showing the following?	MMS & MSW version 1.0	DR	Please provide a clear diagrammatic representation of the project scenario including the waste treatment steps as well as final disposal; use of methane and also the auxiliary energy to run the project treatment steps; and the fraction of volatile solids degraded within the project boundary in the pre-project situation before disposal.	CAR-24	Ok
B.3.11.1.All the manure waste treatments steps as well as its final disposal	MMS & MSW version 1.0	DR	Please provide documentary evidence to confirm that manure is not stored more than 24 hours.	CL-7	Ok
B.3.11.2.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	Refer to CAR above	CAR-24	Ok
B.3.11.3.The fraction of volatile solids degraded within the project boundary in	MMS &	DR	Refer to CAR above	CAR-24	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
the pre-project situation before disposal.	MSW version 1.0				
B.3.12. Has the precise location of the farm(s) been identified by PP including the following?	MMS & MSW version 1.0	DR	Please also include the co-ordinates of the farms wherefrom the organic waste is being sourced.	CAR-25	Ok
B.3.12.1.Co-ordinates of farm(s) using global positioning system	MMS & MSW version 1.0	DR	Refer to CAR above	CAR-25	Ok
B.3.12.2.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	Please provide the road distances of the itineraries between the farms from which waste is sourced and the manure central treatment plant using information from official sources.	CAR-26	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? •	EB 101 Report Annex 2 §94 EB 101 Report Annex 1 §59	DR	No	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?	EB 101 Report Annex 2 §75 EB 101 Report Annex 1 §61	DR	As per the applied methodology, baseline scenario should be identified from the perspective of the owner of central treatment plant, as well as from the perspective of the multiple livestock farms owners. Please clarify and correct the presentation in section B.4 of the PDD accordingly.	CAR-27	Ok
B.4.3. If the methodology requires use of the tools to identify the baseline scenario, have all	EB 101 Report	DR	As per the applied methodology, the baseline scenario and demonstration of additionality is to be performed using	CAR-28	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
those been applied?	Annex 2 §77		the "Combined tool to identify the baseline scenario and demonstrate additionality". Acknowledging the existing facilities of waste management at the respective farms, please clarify the reference to greenfield facilities.		
B.4.4. Are there relevant national and/or sectoral policies to identify the baseline scenario?	EB 101 Report Annex 2 §81 EB 101 Report Annex 1 §64	DR	Yes, the relevant national and sectoral policies have been referred.	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?	EB 101 Report Annex 2 §83d	DR	Yes	Ok	Ok
B.4.6. Are there relevant circumstances to identify the baseline scenario?	EB 101 Report Annex 2 §81	DR	Yes	Ok	Ok
B.4.7. Does the methodology require several alternative scenarios to be considered in the identification of the most reasonable baseline scenario?	EB 101 Report Annex 2 §78	DR	Yes	Ok	Ok
B.4.8. If the methodology requires several alternative scenarios to be considered in the identification of the most reasonable baseline scenario, are all credible scenarios that are in the PDD and are supplementary to those required by the methodology reasonable in the context of the proposed GS project?	EB 101 Report Annex 2 §78	DR	The scenarios to be presented taking into account the existing and greenfield facility are not presented in accordance with the methodology.	CAR-29	Ok
B.4.9. If the proposed project activity includes	EB70 Report	DR	Refer to CAR above	CAR-29	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
several different facilities, technologies, outputs or services, do the alternative scenarios for each of them be identified separately?	Annex 8				
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?	EB70 Report Annex 8	DR	Refer to CAR above	CAR-29	Ok
B.4.11. Does the list of alternative scenarios given in the PDD include the following?	EB 101 Report Annex 2 §93	DR	Refer to CAR above	CAR-29	Ok
B.4.11.1.The project activity is undertaken without being registered as a GS project	EB 101 Report Annex 2 §93a	DR	Refer to CAR above	CAR-29	Ok
B.4.11.2.All plausible alternatives	EB 101 Report Annex 2 §93b	DR	Refer to CAR above	CAR-29	Ok
B.4.11.3.Comply with all applicable and enforced legislation	EB 101 Report Annex 2 §93c	DR	Refer to CAR above	CAR-29	Ok
B.4.12. Has the PP explained how the baseline scenario is established in accordance with the selected methodology(ies)?	GS-PDD-FORM Ver. 1.2 EB 101 Report Annex 1 §59	DR	Refer to CAR above	CAR-29	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.4.13. Where the procedure in the selected methodology(ies) involves several steps, has the PPs described how each step is applied and transparently documented the outcome of each step?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR-29	Ok
B.4.14. Has the PP provided and explained all data used to establish the baseline scenario (variables, parameters, data sources, etc.)?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR-29	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	Refer to CAR above	CAR-29	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 EB 101 Report Annex 2 §80	DR	Refer to CAR above	CAR-29	Ok
B.4.17. Has the selected methodology been correctly applied with respect to baseline identification?	EB 101 Report Annex 2 §63b	DR	Refer to CAR above	CAR-29	Ok
The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste					
B.4.18. 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	MMS & MSW version 1.0	DR	The PDD does not present the case of managing the manure in the existing facilities, with 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).	CAR-30	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
Inventories (Volume 4, Chapter 10, Table 10.17) been taken into consideration by PP?					
B.4.19. 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	Refer to CAR above	CAR-30	Ok
B.4.20. 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	Please provide documentary evidence for the following: - the common practice for the farms and facilities is uncovered anaerobic lagoons/ponds; - the lagoon systems of common practice and lagoons depth; and - the retention time of the manure in the stated lagoon systems above is greater than 1 month long.	CL-8	Ok
B.4.21. 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	Refer to CL above	CL-8	Ok
B.4.22. In case of project with managing the manure for electricity generation, has the following baseline alternatives been considered by PP?	MMS & MSW version 1.0	DR	The alternatives for electricity and heat are not presented in accordance with the methodology in the PDD. In addition to the alternative baseline scenarios to be identified for managing the manure, alternative scenarios for the use of gas generated from an anaerobic digester (biogas) shall also be identified if this is an aspect of the project activity.	CAR-31	Ok
B.4.22.1.Electricity generation from biogas, undertaken without being	MMS & MSW	DR	Refer to CAR above	CAR-31	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
registered as GS project activity;	version 1.0				
B.4.22.2.Electricity generation in existing or new renewable based captive power plant(s);	MMS & MSW version 1.0	DR	Refer to CAR above	CAR-31	Ok
B.4.22.3.Electricity generation in existing and/or new grid-connected power plant;	MMS & MSW version 1.0	DR	Refer to CAR above	CAR-31	Ok
B.4.22.4.Electricity generation in an off-grid fossil fuel fired captive power plant;	MMS & MSW version 1.0	DR	Refer to CAR above	CAR-31	Ok
B.4.22.5.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	Refer to CAR above	CAR-31	Ok
B.4.23. In case of project with managing the manure for heat generation, has the following baseline alternatives been considered by PP?	MMS & MSW version 1.0	DR	Refer to CAR above	CAR-31	Ok
B.4.23.1.Heat generation from biogas undertaken without being registered as GS project activity;	MMS & MSW version 1.0	DR	Refer to CAR above	CAR-31	Ok
B.4.23.2.Heat generation in existing or new fossil fuel fired cogeneration plant(s);	MMS & MSW version 1.0	DR	Refer to CAR above	CAR-31	Ok
B.4.23.3.Heat generation in existing or new renewable based cogeneration plant(s);	MMS & MSW version 1.0	DR	Refer to CAR above	CAR-31	Ok
B.4.23.4.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	Refer to CAR above	CAR-31	Ok
B.4.23.5.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	Refer to CAR above	CAR-31	Ok
B.4.23.6.Any other source, such as district	MMS &	DR	Refer to CAR above	CAR-31	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
heat; and	MSW version 1.0				
B.4.23.7.Other heat generation technologies (e.g. heat pumps or solar energy).	MMS & MSW version 1.0	DR	Refer to CAR above	CAR-31	Ok
B.4.24. In case of project with the treatment of the fresh waste, has the following alternatives or combinations of these alternatives been considered by PP?	MMS & MSW version 1.0	DR	Other organic waste emissions besides manure are counted as zero in the emission reduction calculations.	Ok	Ok
B.4.25. 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.4.26. 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.4.27. Disposal of the fresh waste in a SWDS without a LFG capture system;	MMS & MSW version 1.0	DR	n/a	Ok	Ok
B.4.27.1.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.4.27.2.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.4.27.3.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
B.4.27.4.: 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.4.27.5.Part of the organic fraction of the	MMS &	DR	n/a	Ok	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
solid waste is treated in an anaerobic digester and not disposed in the SWDS;	MSW version 1.0				
B.4.27.6.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.4.28. 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.4.29. 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.4.30. 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**					
B.5.1. Has it been clearly stated in the PDD which analysis method(s) has been chosen for additionality assessment? •	GS-PDD-FORM Ver. 1.2 EB70 Report Annex 8	DR	Demonstration of additionality is carried as per the methodological tool: "Combined tool to identify the baseline scenario and demonstrate additionality", Version 07.0	Ok	Ok
B.5.1. **Prior consideration of CDM**					
B.5.1.1. In case of retroactive projects and all projects undergoing Design Changes to include new technologies/measures, has the prior consideration been demonstrated by	GS-PDD-FORM Ver. 1.2	DR	The section on prior consideration has not been included.	CAR-32	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
submission timeline?					
B.5.1.2. In case of retroactive projects, has the time of first submission is within one year of the project start date?	GS-PDD-FORM Ver. 1.2	DR	The project is indicated as a regular project earlier in the PDD and retroactive subsequently. Please submit the GS preliminary review document.	CL-9	Ok
B.5.1.3. 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.5.1.4. Is the start date of the proposed project activity prior to the date of publication of the PDD for the global stakeholder consultation?	EB 101 Report Annex 1 §31	DR	n/a	Ok	Ok
B.5.1.5. If the start date of a proposed CDM project activity, is prior to the date of publication of the PDD for the global stakeholder consultation, have the PPs demonstrated that the CDM benefits were considered necessary in the decision to undertake the project as a proposed CDM project activity?	EB 101 Report Annex 1 §31	DR	n/a	Ok	Ok
B.5.1.6. If the project was not published and the starting date is on or after 2nd August 2008, have there been list of prior consideration notifications from the UNFCCC website and communication between the project proponent, the Secretariat and the host Party DNA regarding the commencement of a new project activity?	EB 101 Report Annex 1 §32 EB 101 Report Annex 2 §41	DR	n/a	Ok	Ok
B.5.1.7. For the project activities with a starting date before 2nd August 2008 and prior to the	EB 101 Report	DR	n/a	Ok	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
date of publication of the PDD for global stakeholder consultation, did PPs have an awareness of the CDM prior to the project activity start date, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project?	Annex 1 §33a EB 101 Report Annex 2 §42a				
B.5.1.8. For the project activities with a starting date before 2nd August 2008 and prior to the date of publication of the PDD for global stakeholder consultation, was there enough evidence presented to prove that PPs were taking continuing and real actions to secure CDM status for the project in parallel with its implementation?	EB 101 Report Annex 1 §33b EB 101 Report Annex 2 §42b	DR	n/a	Ok	Ok
B.5.1.9. In case of significant gap in the project development history, can a clear conclusion on prior CDM consideration be made? •	EB 101 Report Annex 2 §44	DR	n/a	Ok	Ok
Sub-Step 1a: Definition of alternatives	EB70 Report Annex 8				
Sub-Step 1b: Consistency with mandatory laws and regulations	EB70 Report Annex 8				
B.5.1.10.Has the analysis of compliance of the defined alternatives with the mandatory laws and regulations carried out appropriately?	EB70 Report Annex 8	DR	Reference to 1st CP in context of alternatives for heat is to be clarified and corrected. Further, the identified mandatory laws and regulations have been listed; however, the list does not contain regulations on waste management.	CAR-33	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
Step 2: Investment analysis	EB70 Report Annex 8	DR			
B.5.1.11.Are the input values used in all investment analysis valid, consistent and applicable at the time of the investment decision taken by the PP?	EB105 Report Annex 6 EB 101 Report Annex 2 §96	DR	Yes. The input values used in the investment analysis are valid, consistent, and applicable at the time of the investment decision.	Ok	Ok
B.5.1.12.Are all the listed input values been consistently applied in all calculations?	EB105 Report Annex 6	DR	Yes, all the listed input values have been applied consistently in all calculations.	Ok	Ok
B.5.1.13.Do the PPs rely on values from Feasibility Study Report (FSR) that are approved by national authorities for proposed project activities?	EB 101 Report Annex 2 §101	DR	Yes, the input values are referenced to the FSR that has been approved by the national authorities.	Ok	Ok
B.5.1.14.If PPs rely on FSR,		DR			
B.5.1.14.1. Is it possible to conclude that in the period of time between the finalization of the FSR and the investment decision input values would not have materially changed?	EB 101 Report Annex 2 §101a	DR	Yes, it is possible to conclude that the input values that are based on the FSR are still valid at the time of the investment decision.	Ok	Ok
B.5.1.14.2. Are the values used in the PDD and associated annexes fully consistent with the FSR?	EB 101 Report Annex 2 §101b §101c	DR	Yes, the PDD values are consistent with the FSR.	Ok	Ok
B.5.1.15.Is the plant load factor defined ex-ante in the PDD appropriately?	EB48 Report Annex 11	DR	Yes	Ok	Ok
Sub-step 2a: Determine appropriate analysis method	EB70 Report Annex 8				

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.5.1.16.Has the PDD described the selection process of investment analysis method (simple cost, investment comparison and benchmark analysis) for the proposed project activity?	EB70 Report Annex 8	DR	Yes, the project owners use the benchmark analysis for determining the financial value of the project (page 38 of the PDD).	Ok	Ok
B.5.1.17.Is the choice of the investment analysis method appropriate to the proposed project activity?	EB70 Report Annex 8 EB105 Report Annex 6	DR	Yes, the benchmark analysis is the appropriate method to use for analysing this project. The other two methods (simple cost and investment comparison) are not appropriate since there are revenues to be earned and the project owner does not provide other investment alternatives as a basis for comparison.	Ok	Ok
Sub-step 2b: Option I-Simple cost analysis	EB70 Report Annex 8			Ok	Ok
B.5.1.18.Have all costs associated with the project activity and the alternatives identified in Step 1 been documented?	EB70 Report Annex 8	DR	N/A	Ok	Ok
B.5.1.19.Has it been demonstrated and supported by valid evidence that at least one of the alternatives defined in Step 1 is less costly than the proposed project activity?	EB70 Report Annex 8	DR	N/A	Ok	Ok
Sub-step 2b: Option II-Apply investment comparison analysis	EB70 Report Annex 8				
B.5.1.20.Has the PPs identified a financial indicator (such as IRR, NPV, cost benefit ratio, or unit cost of service (e.g., levelized cost of electricity production in $/kWh or levelized cost of delivered heat in $/G)) which is most suitable for the project type and decision-making context regarding the investment comparison analysis?	EB70 Report Annex 8	DR	N/A	Ok	Ok
Sub-step 2b: Option III. Apply benchmark analysis	EB70 Report Annex 8				

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.5.1.21.Has the PPs identified a financial indicator (such as IRR) which is most suitable for the project type and decision-making context including the alternatives for the benchmark analysis?	EB70 Report Annex 8 EB105 Report Annex 6 EB 101 Report Annex 2 §99a	DR	Yes. The PPs have identified "Equity IRR" as the financial indicator regarding the additionality of the project (page 38 of the PDD).	Ok	Ok
B.5.1.22.Has a pre-tax benchmark been applied?	EB105 Report Annex 6	DR	No. Since the project owners are using Equity IRR as the financial indicator for the project, a pre-tax benchmark cannot be used. The cost of equity, by definition, is an after-tax cost and, therefore, the benchmark is an after-tax measure.	Ok	Ok
B.5.1.23.If post tax benchmark is applied, has actual interest payable been taken into account in the calculation of income tax?	EB105 Report Annex 6	DR	No, since the project is 100% equity financed, there are no interest payables to be taken into account.	Ok	Ok
If the project participant has applied investment comparison or benchmark analysis	EB70 Report Annex 8	DR			
B.5.1.24.If the benchmark is based on parameters that are standard in the market, is the cost of equity determined appropriately? Guideline either by:	EB105 Report Annex 6	DR	Yes	Ok	Ok
B.5.1.25. selecting the values provided in the latest applicable version of Appendix of Investment Analysis Tool? or	EB105 Report Annex 6	DR	Yes. The project owners use the benchmark rate according to the World Bank policy paper "Making Informed Investment Decisions in an Uncertain World: A Short Demonstration" (February 2014).	Ok	Ok
B.5.1.26. by calculating the cost of equity using Capital Asset Pricing Model (CAPM)? •	EB105 Report Annex 6	DR	N/A	Ok	Ok
B.5.1.27.If the benchmark based on parameters that are standard in the market, has the cost	EB105 Report	DR	No. The project owners are calculating an Equity IRR as the financial indicator of the additionality of the project. In	Ok	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
of debt been calculated as the cost of financing in the capital markets (e.g. commercial lending rates and guarantees required for the country and the type of project activity concerned), based on documented evidence from financial institutions with regard to the cost of debt financing of comparable projects?	Annex 6 EB70 Report Annex 8		addition, they are using a benchmark rate according to the World Bank policy paper "Making Informed Investment Decisions in an Uncertain World: A Short Demonstration" (February 2014) as indicated on page 38 of the PDD. Therefore, it is not necessary to use the cost of debt as part of this comparison.		
B.5.1.28.Has the discount rates and benchmarks been derived and supported appropriately?	EB70 Report Annex 8	DR	Yes. The project owners use the benchmark rate according to the World Bank policy paper "Making Informed Investment Decisions in an Uncertain World: A Short Demonstration" (February 2014).	Ok	Ok
If the company's internal benchmark has been used for the expected return on equity: (Only applicable to benchmark analysis)	EB105 Report Annex 6				
B.5.1.29.Has it been demonstrated that there is only one possible project developer?	EB105 Report Annex 6	DR	N/A	Ok	Ok
B.5.1.30.Has it been demonstrated that same benchmark values are used for similar projects with similar risks, developed by the same company or, if the company is brand new, would have been used for similar projects in the same sector in the country/region?	EB105 Report Annex 6	DR	N/A	Ok	Ok
B.5.1.31.If the company's expected return on equity is used as a benchmark, does the percentage of debt financing and equity financing reflect the long-term debt/equity finance structure of the legal entity owning the assets of the project activity?	EB105 Report Annex 6	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.5.1.32.If the company's expected return on equity is used as a benchmark, has the cost of debt been based on the weighted average cost of debt financing of the legal entity owning the project activity?	EB105 Report Annex 6	DR	N/A	Ok	Ok
B.5.1.33.In case of loans, is the weighted average cost of outstanding long-term debt used as a benchmark?	EB105 Report Annex 6	DR	N/A	Ok	Ok
B.5.1.34.In case of bonds, is the weighted average yield of the bonds used as a benchmark?	EB105 Report Annex 6	DR	N/A	Ok	Ok
B.5.1.35.In case of bonds, are the key parameters of the bond including the time of maturity, yield, registration issuance in the financial system and set-up in the market documented?	EB105 Report Annex 6	DR	N/A	Ok	Ok
B.5.1.36.In case of debt financing from a parent company, is the transfer of capital to the legal entity documented?	EB105 Report Annex 6	DR	N/A	Ok	Ok
B.5.1.37.In case of loans from a financial institution, is the contract of lending between the financial institution and the legal entity owning the assets of the project activity, or, in absence of the contract, a letter from the bank stating its intention to award the loan and the key terms for the loan documented and supported by the appropriate evidence?	EB105 Report Annex 6	DR	N/A	Ok	Ok
Sub-step 2c: Calculation and comparison of financial indicators (Only applicable to investment comparison and benchmark analysis)	EB70 Report Annex 8	DR			

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.5.1.38.Has the period of assessment including IRR and equity IRR calculations been chosen appropriately?	EB105 Report Annex 6	DR	Not clear. A 19-year horizon has been selected to evaluate the project, but the project owners do not justify the investment horizon in the PDD.	CAR34	Ok
B.5.1.39.Have the PPs justified the period of assessment in the context of the underlying project activity?	EB105 Report Annex 6	DR	Please see answer B.5.1.38.	CAR34	Ok
B.5.1.40.In case IRR assessment period doesn't cover the technical lifetime of the project, does the cash flow in the final year include a fair value of the project activity assets at the end of the assessment period?	EB105 Report Annex 6	DR	Yes. A fair value of project assets is included in the final year's cash flows.	Ok	Ok
B.5.1.41.Has the fair value of the project activity assets been calculated in accordance with local accounting regulations where available, or international best practice?	EB105 Report Annex 6	DR	Yes. The fair value of project assets is the book value of the assets that has not been depreciated over the 19-year life of the project.	Ok	Ok
B.5.1.42.Do the fair value calculations include both the book value of the asset and the reasonable expectation of the potential profit or loss on the realization of the assets?	EB105 Report Annex 6	DR	Yes. The fair value of project assets is the book value of the assets that has not been depreciated over the 19-year life of the project.	Ok	Ok
B.5.1.43.Have all relevant costs been included for the calculation of IRR or other relevant financial indicator?	EB70 Report Annex 8 EB105 Report Annex 6	DR	Yes. All relevant costs have been included in the IRR calculations.	Ok	Ok
B.5.1.44.In case of project IRR, has the cost of financing expenditures (i.e. loan repayments and interest) been included?	EB105 Report Annex 6	DR	N/A	Ok	Ok
B.5.1.45.Has the depreciation, and other non-cash items related to the project activity, (those deducted in estimating gross profits on which tax is calculated) been added back to	EB105 Report Annex 6	DR	Yes. Depreciation has been added back to the net profits in the calculation of the Equity IRR.	Ok	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
net profits in the calculation of the financial indicator (e.g. IRR, NPV)?					
B.5.1.46.In case of using post-tax bencmark, has taxes been included as an expense in the IRR/NPV calculation?	EB105 Report Annex 6	DR	Yes, taxes have been included as an expense in the Equity IRR calculation.	Ok	Ok
B.5.1.47.In case any risk premiums are applied in determination of the benchmark, are the same risks associated with the project type or activity, too?	EB 101 Report Annex 2 §100b EB70 Report Annex 8	DR	N/A	Ok	Ok
B.5.1.48.In the equity IRR, has the cost of debt (loan, bond etc.) been considered as the net cash outflow?	EB105 Report Annex 6	DR	No, since the project is 100% equity financed, there is no cost of debt to be considered as a net cash outflow.	Ok	Ok
B.5.1.49.In cases where an investment analysis is carried out in nominal terms and the available IRR benchmarks are in real terms, have PPs converted the real term values of benchmarks to nominal values by adding the inflation rate?	EB105 Report Annex 6	DR	N/A	Ok	Ok
B.5.1.50.Has it been demonstrated that proposed project activity isn't economically or financially feasible without the revenue from CDM?	EB70 Report Annex 8 EB 101 Report Annex 2 §96b	DR	Yes. The current set of calculations demonstrate that the proposed project activity is not economically or financially feasible before the inclusion of the revenue from CDM.	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.5.1.51.In case the project with managing the manure for greenfield facilities, has an economic assessment of the identified lagoon design option been carried out as per step 3 (investment analysis) of the latest applicable version of the "Combined tool to identify the baseline scenario and demonstrate additionality"?	MMS & MSW version 1.0	DR	Yes. The project owners provide a description and assessment of lagoon designs on pages 19 through 28 of the PDD.	Ok	Ok
B.5.1.52.In case the project with managing the manure for greenfield facilities, has the least cost anaerobic lagoon design option from the options identified been chosen by PP?	MMS & MSW version 1.0	DR	Yes. The project owners discuss the current practice in Turkey on page 28 of the PDD.	Ok	Ok
B.5.1.53.In case the project with managing the manure for greenfield facilities with several anaerobic lagoon design options and with comparably low cost exist, has the one with the lowest lagoon depth as the baseline lagoon design been chosen?	MMS & MSW version 1.0	DR	Yes. The project owners discuss the depth of the lagoon system on page 23 of the PDD.	Ok	Ok
B.5.1.54.In case the project with managing the manure for greenfield facilities, has the following been documented explicitly by PP?	MMS & MSW version 1.0	DR	Yes	Ok	Ok
B.5.1.54.1. Land cost;	MMS & MSW version 1.0	DR	There is no documentation on the land cost, admin cost, revenue generation among others, please clarify.	CAR35	Ok
B.5.1.54.2. Engineering, procurement and construction cost;	MMS & MSW version 1.0	DR	Yes, this cost is documented (ONAYLI SÖZLEŞME_Süt Fabrikası ve Biyogaz Tesisinin Ortak İnşaat Sözleşmesi)	Ok	Ok
B.5.1.54.3. Labour cost;	MMS & MSW version 1.0	DR	Stated as "collected from the site personnel"; there is no documentation	Ok	Ok
B.5.1.54.4. Operation and maintenance cost;	MMS & MSW version 1.0	DR	Assumed as a certain percentage of total cost according to https://ec.europa.eu/energy/intelligent/projects/sites/iee-projects/files/projects/documents/biogasin_criteria_to_as	Ok	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
			ess_biogas_investments.pdf		
B.5.1.54.5. Administration cost;	MMS & MSW version 1.0	DR	There is no documentation	Ok	Ok
B.5.1.54.6. Fuel cost;	MMS & MSW version 1.0	DR	There is no documentation	Ok	Ok
B.5.1.54.7. Capital cost and interest;	MMS & MSW version 1.0	DR	Yes, the cost of equity is benchmarked according to the World Bank policy paper "Making Informed Investment Decisions in an Uncertain World: A Short Demonstration" (February 2014).	Ok	Ok
B.5.1.54.8. Revenue from electricity sales;	MMS & MSW version 1.0	DR	There is no documentation	Ok	Ok
B.5.1.54.9. All other costs of implementing the technology of each lagoon design option;	MMS & MSW version 1.0	DR	Yes. The project owners provide a description and assessment of lagoon designs on pages 19 through 28 of the PDD.	Ok	Ok
B.5.1.54.10. All revenues generated by the implementation of the proposed technology (including energy savings due to captive use of biogas as fuel for either electricity or heat generation at the project site, revenue on account of avoided water consumption, fossil fuel replacement, sale of concentrated solids as fertilizers, subsidies/fiscal incentives etc.).	MMS & MSW version 1.0	DR	There is no documentation	Ok	Ok
Sub-step 2d: Sensitivity analysis (Only applicable to investment comparison and benchmark analysis)	EB70 Report Annex 8				
B.5.1.55.Has a sensitivity analysis showing whether the conclusion regarding the financial/economic attractiveness is robust to	EB70 Report Annex 8 EB105	DR	Yes. A sensitivity investment is provided on page 40 of the PDD.	Ok	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
reasonable variations in the critical assumptions, been included in the PDD?	Report Annex 6				
B.5.1.56.Has the range of variations selected been justified in the context of the project?	EB105 Report Annex 6	DR	Yes. The project owners discuss the sensitivity analysis ranges on page 40 of the PDD.	Ok	Ok
Step-3: Barrier analysis	EB70 Report Annex 8				
B.5.1.57.Have the PPs used and referred the "Guidelines for Objective Demonstration and Assessment of Barriers"?	EB50 Report Annex 13	DR	N/A	Ok	Ok
Sub-step 3a: Identify barriers that would prevent the implementation of the proposed CDM project activity					
B.5.1.58.Has the PPs established realistic and credible barriers that would prevent the implementation of the proposed CDM project activity? •	EB70 Report Annex 8	DR	N/A	Ok	Ok
Sub-step 3b: Show that the identified barriers would not prevent the implementation of at least one of the alternatives (except the proposed project activity)	EB70 Report Annex 8	DR			
B.5.1.59.Has the identified barriers that would prevent the implementation of the proposed project activity, but not the implementation of at least one of the alternatives in particular the identified baseline scenario, been supported by the clear and valid evidence?	EB70 Report Annex 8 EB 101 Report Annex 2 §103 EB50 Report Annex 13	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.5.1.60.Is it demonstrated and supported by proper evidence how the CDM alleviates each of the identified barriers to a level that the project is not prevented anymore from occurring by any of the barriers?	EB50 Report Annex 13 EB70 Report Annex 8	DR	N/A	Ok	Ok
Investment, technological and other barriers					
B.5.1.61.In case of investment barriers, is it demonstrated in the PDD that the financing of the project was assured only due to the benefit of the CDM?	EB50 Report Annex 13	DR	N/A	Ok	Ok
B.5.1.62.Can any of the indicated barriers be eliminated by additional financial investments into the proposed project activity?	EB50 Report Annex 13	DR	N/A	Ok	Ok
B.5.1.63.While demonstrating barriers related to the lack of access to capital, technologies and skilled labour, do the PPs provide information on the nature of the companies and entities involved in the financing and implementation of the project?	EB50 Report Annex 13	DR	N/A	Ok	Ok
Barriers due to prevailing practice					
B.5.1.64.In case PPs claim that project activity is “first-of-its-kind” have those claims been substantiated and supported by proper evidence?	EB70 Report Annex 8 EB84 Report Annex 6 §12	DR	N/A	Ok	Ok
Step-4: Common practice analysis					

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.5.1.65.If the project is not "first-of-its-kind", have PPs applied the common practice analysis appropriately?	EB70 Report Annex 8 EB101 Report Annex 2 §108 EB84 Report Annex 7	DR	Yes	Ok	Ok
B.5.1.66.Is the selection of the assessment region explained and justified completely and correctly?	EB101 Report Annex 2 §108a EB84 Report Annex 7 §9	DR	Yes	Ok	Ok
Sub-step 4a: The proposed CDM project activity(ies) applies measure(s) that are listed below (Questions from B.5.69 to B.5.81 are applicable) • **Fuel and feedstock switch** • **Switch of technology with or without change of energy source (including energy efficiency improvement as well as use of renewable energies);** • **Methane destruction** • **Methane formation avoidance**	EB70 Report Annex 8 EB84 Report Annex 7 §10				
B.5.1.67.Have all projects within an applicable output range (+/-50%) been included into the common practice analysis?	EB84 Report Annex 7 §13	DR	Yes, the design capacity of the proposed project is 4.268 MWe. Therefore, the applicable output range is from 2.134 MWe-6.402 MWe.	Ok	Ok
B.5.1.68.Have the similar projects (both CDM and non-CDM) been identified?	EB84 Report Annex 7 §14	DR	Please clearly depict the output from the application of the steps in the common practice tool in the PDD including values for Nall and Ndiff. The step 3 is not correctly applied.	CAR36	Ok
B.5.1.69.If the similar projects have been	EB84 Report	DR	Refer to CAR above	CAR36	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
identified, are the following conditions fullfilled?	Annex 7 §14				
B.5.1.69.1. Are the projects located in the applicable geographical area?	EB84 Report Annex 7 §14	DR	Yes	Ok	Ok
B.5.1.69.2. Are the projects applied the same measure as the proposed project activity?	EB84 Report Annex 7 §14	DR	Refer to CAR above	CAR36	Ok
B.5.1.69.3. Do the projects use the same energy source/fuel and feedstock as the proposed project activity, if a technology switch measure is implemented by the proposed project activity?	EB84 Report Annex 7 §14	DR	Refer to CAR above	CAR36	Ok
B.5.1.69.4. Do the plants in which the projects have been implemented produce goods or services with comparable quality, properties and applications areas (e.g. clinker) as the proposed project plant?	EB84 Report Annex 7 §14	DR	Refer to CAR above	CAR36	Ok
B.5.1.69.5. Are the capacity or output of the projects within the applicable capacity or output range calculated in Question B.5.69?	EB84 Report Annex 7 §14	DR	Yes	Ok	Ok
B.5.1.69.6. Do the projects start commercial operation before the PDD published for global stakeholder consultation or before the start date of proposed project activity, whichever is earlier for the proposed project	EB84 Report Annex 7 §14	DR	Yes	Ok	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
activity?					
B.5.1.70.Within the projects identified in Question B.5.1.71, have the following project activities been identified?	EB84 Report Annex 7 §15	DR	Yes	Ok	Ok
B.5.1.70.1. Non registered CDM project activities	EB84 Report Annex 7 §15	DR	Yes	Ok	Ok
B.5.1.70.2. Project activities not submitted for registration	EB84 Report Annex 7 §15	DR	Yes	Ok	Ok
B.5.1.70.3. Project activities not undergoing validation	EB84 Report Annex 7 §15	DR	Yes	Ok	Ok
B.5.1.71.Within similar projects identified in Question B.5.1.70, have the projects applying technologies that are different to the technology applied in the proposed project activity been identified?	EB84 Report Annex 7 §16 EB70 Report Annex 8 EB101 Report Annex 2 §108c	DR	Yes	Ok	Ok
B.5.1.72.Has the factor (F=1-Ndiff / Nall) been calculated correctly?	EB84 Report Annex 7 §17	DR	Yes	Ok	Ok
B.5.1.73.Based on an analysis provided in the PDD, is it possible to conclude that the proposed project activity is not common practice?	EB84 Report Annex 7 §18	DR	Yes	Ok	Ok
Sub-step 4b: The proposed CDM project activity(ies) doesn't apply any of the measures that are listed in Sub-step 4a above (Questions B.5.1.76 and B.5.1.77 are applicable):					
B.5.1.74.Has the PPs provided an analysis of any other activities that are operational and that	EB70 Report Annex 8	DR	Refer to CAR above	CAR36	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
are similar to the proposed project activity in the PDD?	EB101 Report Annex 2 §109b				
B.5.1.75.If similar activities have been identified, has it been demonstrated that there are essential distinctions between them and proposed project activity, which demonstrate the necessity of the CDM benefits?	EB70 Report Annex 8 EB101 Report Annex 2 §109c	DR	Refer to CAR above	CAR36	Ok
In all cases to check additionality at the final stage					
B.5.1.76.Has the selected methodology been correctly applied with respect to additionality?	EB101 Report Annex 2 §63d	DR	Refer to CAR above	CAR36	Ok
B.5.1.77.As a result, has the PPs demonstrated that the project activity is additional in accordance with the selected methodology(ies) and tool(s)?	GS-PDD-FORM Ver. 1.2 EB101 Report Annex 2 §88	DR	Refer to CAR above	CAR36	Ok
B.6. **Sustainable Development Goals (SDG) outcomes**					
B.6.1. Has the PPs specified the relevant SDG target for each of three SDGs addressed by the project?	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.6.1. **Explanation of methodological choices/approaches for estimating the SDG outcome**					
B.6.1.1. Has the PPs 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			
B.6.1.1.1. Baseline	GS-PDD-FORM Ver. 1.2	DR	Please clarify and correct on the following points: - The grid emission factor has not been calculated using the correct weights for OM and BM. Also, acknowledging that the grid emission factor value latest official emission factor of Turkey has been used in the project depending on the project type has been published by the Ministry of Energy and Natural Resources; - The average number of animals and respective types considered in the calculation of baseline CH4 emissions are to be clarified; - Also clarify which option as per the methodology has been considered for Annual volatile solid excretions for livestock LT (VS_{LT}) and annual average number of animals of type LT (N_{LT});	CAR37	Ok
B.6.1.1.2. Project	GS-PDD-FORM Ver. 1.2	DR	Please clarify and correct on the following points: - Which option as per the methodology has been considered for project N2O emission from animal manure; - The project emissions from consumption of electricity is to be considered only if it not related to the anaerobic digester; - For 'project emissions from manure transportation' it is indicated that 'Option A: Monitoring fuel consumption' as per the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion" is used. Please clarify the basis of arriving at the fuel consumption estimate. Further,	CAR38	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
			the reference to the version of the tool is to be corrected.		
B.6.1.1.3. Leakage	GS-PDD-FORM Ver. 1.2	DR	It is indicated that 'project activity does not involve land application of the treated manure or composting'. Please clarify what is happening to the treated manure and correct the PDD accordingly.	CAR39	Ok
B.6.1.1.4. Net benefit	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR39	Ok
B.6.1.2. Has the PPs clearly stated which equations will be used in calculating net benefit?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR39	Ok
B.6.1.3. Has the PPs explained and justified all relevant methodological choices including the following?	GS-PDD-FORM Ver. 1.2 EB101 Report Annex 1 §72	DR	Refer to CAR above	CAR39	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 EB101 Report Annex 1 §72	DR	Refer to CAR above	CAR39	Ok
B.6.1.3.2. Where the methodology(ies) provide different options to choose from , indicate and justify which option is chosen for the project activity	GS-PDD-FORM Ver. 1.2 EB101 Report	DR	Refer to CAR above	CAR39	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	Annex 1 §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	Refer to CAR above	CAR39	Ok
B.6.2. **Data and parameters fixed ex ante**					
B.6.2.1. Have the PPs 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	The grid emission factor fixed ex-ante has not been included in the section B.6.2. Please clarify and correct accordingly.	CAR40	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	Refer to CAR above	CAR40	Ok
B.6.2.3. Are 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
B.6.2.3.2. Data/parameter	GS-PDD-FORM	DR	Yes	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.6.2.3.3. 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 Ver. 1.2	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.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)?	EB101 Report Annex 1 §71 EB101 Report Annex 2 §110	DR	The steps taken and equations applied to calculate the baseline, project, leakage and net outcomes and comply with the requirements of the methodology including applicable tool(s) has not been presented in section B.6.3 of the PDD. Further, the grid emission factor is to be corrected. Furthermore, the basis of arriving at the emission reductions from heat are to be clarified along with the basis of the efficiency of heat generation equipment.	CAR41	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.3.1.1. project outcome	EB101 Report Annex 1 §71 EB101 Report Annex 2 §110	DR	Refer to CAR above	CAR41	Ok
B.6.3.1.2. baseline outcome	EB101 Report Annex 1 §71 EB101 Report Annex 2 §110	DR	Refer to CAR above	CAR41	Ok
B.6.3.1.3. leakage	EB101 Report Annex 1 §71 EB101 Report Annex 2 §110	DR	Refer to CAR above	CAR41	Ok
B.6.3.1.4. Net outcomes	EB101 Report Annex 1 §71 EB101 Report Annex 2 §110	DR	Refer to CAR above	CAR41	Ok
B.6.3.2. Where the methodology allows for selection between options for equations or parameters, has adequate justification been provided in the PDD?	EB101 Report Annex 2 §111	DR	Refer to CAR above	CAR41	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.6.3.3. Has the PPs 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	Refer to CAR above	CAR41	Ok
B.6.3.4. Has the PPs 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	Refer to CAR above	CAR41	Ok
B.6.3.5. If any of these estimates has been determined by a sampling approach, has the PP 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	Refer to CAR above	CAR41	Ok
B.6.3.6. Has the PPs provided a sample calculation for each equation used?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR41	Ok
B.6.3.7. Have the PPs provided a sample calculation for each equation used, substituting the values used in the equations?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR41	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 project emissions, baseline emissions and leakages are applied by the PPs?	EB101 Report Annex 2 §112	DR	Refer to CAR above	CAR41	Ok
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?	EB101 Report Annex 2 §63c	DR	Refer to CAR above	CAR41	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste					
B.6.3.10.Are the baseline emissions calculated using equation (1) in the methodology?	MMS & MSW version 1.0	DR	The equation 1 as per the applied methodology has not been indicated.	CAR42	Ok
B.6.3.11.Are the baseline emissions from animal waste treatment calculated using equation (2) in the methodology?	MMS & MSW version 1.0	DR	Yes, the baseline emissions from animal waste treatment are calculated using equation (2) in the methodology.	Ok	Ok
B.6.3.12.Are the baseline emissions from baseline CH4 emissions from manure treatment using equation (3) in the methodology?	MMS & MSW version 1.0	DR	Yes, the baseline emissions from baseline CH4 emissions from manure treatment are calculated using equation (3) in the methodology.	Ok	Ok
B.6.3.13.Has $VS_{LT,y}$ been determined using the options available in the methodolgy?	MMS & MSW version 1.0	DR	It is indicated in the PDD that $VS_{LT,y}$ would be determined using the option 1 as in the methodolgy	Ok	Ok
B.6.3.14.Has LT (NL_T) been determined using the options available in the methodolgy?	MMS & MSW version 1.0	DR	It is indicated in the PDD that NL_T would be determined using the option 2 as in the methodolgy	Ok	Ok
B.6.3.15.Has the baseline emissions associated with electricity generation (BEEC,y) be calculated using the latest applicable version of "Tool to calculate baseline, project and/or leakage emissions from electricity consumption"?	MMS & MSW version 1.0	DR	The baseline emissions associated with electricity generation (BEEC,y) are to be updated with the change in the grid emission factor.	CAR43	Ok
B.6.3.16.Are the baseline emissions associated with heat generation (BEHG,y) calculated using equation (11) in the methodology?	MMS & MSW version 1.0	DR	Yes	Ok	Ok
B.6.3.17.Are the project emissions calculated properly using equations (12) to (21), where relevant, in the methodology?	MMS & MSW version 1.0	DR	The options for the calculation of project emissions are clearly indicated. However, the values are to be corrected for project emissions from use of electricity for change in	CAR44	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
			grid emission factor. Further, provide the documentary evidence that for this project average return distance between the origin and the destination is 10 km.		
B.6.3.18.Are the leakage emissions calculated properly using equations (22) to (32), where relevant, in the methodology?	MMS & MSW version 1.0	DR	Please clarify on the statement 'Proposed project activity does not involve land application of treated manure, or composting process, emissions according to these emissions accounted as zero'. Further details on the same are to be included in the PDD too.	CAR45	Ok
B.6.3.19.Are the emission reductions calculated properly using equations (33) and (34) in the methodology?	MMS & MSW version 1.0	DR	Yes, the reference to equation 34 in the methodology has been indicated. However, please clarify as to how it is ensured that emissions due to agricultural waste is not taken into account for baseline emission calculation as per applied methodology.	CAR46	Ok
B.6.4. **Summary of the ex-ante estimates of each SDG impact**					
B.6.4.1. Have the PPs 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	The values are to be updated in section B.6.4 based on previous comments and also the decimal places are to be removed.	CAR47	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, the data/parameter tabular formats for monitoring, has the name of each relevant SDG indicator included.	Ok	Ok
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	The relevant data/parameters should be included following the order in the methodology and applied tools. Also, the format as per the PDD template is to be correctly	CAR48	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
			applied.		
B.7.1.3. Has the unit of each data/parameter been included?	GS-PDD-FORM Ver. 1.2	DR	Yes, the unit of each data/parameter has been included.	Ok	Ok
B.7.1.4. Has the description of each data/parameter been included?	GS-PDD-FORM Ver. 1.2	DR	Yes, the description of each data/parameter has been included.	Ok	Ok
B.7.1.5. Has the source of each data/parameter been included?	GS-PDD-FORM Ver. 1.2	DR	Yes, the source of each data/parameter has been included.	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	N/A	Ok	Ok
B.7.1.7. Has the applied value of each data/parameter been included?	GS-PDD-FORM Ver. 1.2	DR	The row of value(s) applied is missing in the tables presented in section B.7.	CAR49	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 PPs included which measurement equipment is used for monitoring?	GS-PDD-FORM Ver. 1.2	DR	Yes	Ok	Ok
B.7.1.10. Have the PPs included description of calibration procedures for the monitoring equipment including the following?	GS-PDD-FORM Ver. 1.2	DR	The description of calibration procedures for the monitoring equipment are to be included, in particular for the electricity generation and biogas flow and methane content therein.	CAR50	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.7.1.10.1. Frequency of the calibration	GS-PDD-FORM Ver. 1.2 EB101 Report Annex 1 §81c ACM 0002 Version 20	DR	Refer to CAR above	CAR50	Ok
B.7.1.10.2. Accuracy of the calibration	EB101 Report Annex 1 §81b	DR	Refer to CAR above	CAR50	Ok
B.7.1.10.3. Uncertainty of the calibration	EB101 Report Annex 1 §81b	DR	Refer to CAR above	CAR50	Ok
B.7.1.10.4. Calibrating agency/person	EB101 Report Annex 1 §81c	DR	Refer to CAR above	CAR50	Ok
B.7.1.10.5. The relevant national/international standards	EB101 Report Annex 1 §81c	DR	Refer to CAR above	CAR50	Ok
B.7.1.11. Has the accuracy level of the measurement method included?	EB101 Report Annex 1 §81b	DR	The accuracy level of the measurement method is to be included, in particular for the electricity generation and biogas flow and methane content therein.	CAR51	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
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 EB101 Report Annex 1 §81a ACM 0002 Version 20.0	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	In context of the biogas flow (Vf (coming from wastewater treatment plant)), please clarify the reference to WWTP in the additional comment row, wherein it is also indicated that biogas volume recovered from wwtp will be excluded from baseline emission calculations.	CAR52	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
B.7.1.16.3. Calculation of leakage.	GS-PDD-	DR	Yes	Ok	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	FORM Ver. 1.2				
B.7.1.17.Have the PPs developed and described the monitoring plan for the proposed project activity in accordance with the selected methodology(ies) and all other applicable rules and requirements?	EB101 Report Annex 1 §78 EB101 Report Annex 2 §117	DR	The monitoring plan does not include all the relevant tools and the associated monitoring parameters. As per the methodology, the emission reductions achieved by the project activity from the anaerobic digester due to the collection and destruction of biogas shall be determined ex post through direct measurement of the amount of biogas fuelled, flared or gainfully used. Further, the number of employment is stated inconsistently as 27 staff, whereas earlier the PDD presented 20. Furthermore, the contribution to SDG12 in terms of waste managed is not indicated as a monitoring parameter.	CAR53	Ok
B.7.1.18.Does the monitoring plan include all data, parameters and related information required by the selected methodology(ies)?	EB101 Report Annex 2 §118a-ii	DR	All the relevant monitoring parameters as per the methodology and the associate tools have not been included in the section for e.g., measurement of the biogas flow, methane content, operation of engines, operation of flare etc. Further, it is unclear as to how the baseline emissions from the co-digestion of the agricultural waste would be discounted. As per the methodology, 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.	CAR54	Ok
B.7.1.19.Are the monitoring arrangements described in the monitoring plan feasible within the project design?	EB101 Report Annex 2	DR	Refer to CAR above	CAR54	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
	§118b				
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 EB101 Report Annex 2 §29e EB86 Report Annex 4	DR	Please clarify the statement in section B.7.2 'No sampling plan will be necessary as in 1st CP'.	CAR-55	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 PP provided a description of the sampling plan in accordance with the recommended outline for a sampling plan in the latest applicable version of "Standard for Sampling and Surveys for CDM Project Activities and Programme of Activities"? (• •	GS-PDD-FORM Ver. 1.2 EB105 Report Annex 1 §29 §30 §31 §32 §33	DR	N/A	Ok	Ok
B.7.2.3. If the sampling approach is used by the PPs, does the sampling plan present a reasonable approach for obtaining unbiased, reliable estimates of the variables?	EB86 Report Annex 4 §40a	DR	N/A	Ok	Ok
B.7.2.4. If the sampling approach is used by the PPs, are the elements of objectives and reliability requirements complete?	EB86 Report Annex 4 §40a-i	DR	N/A	Ok	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
B.7.2.5. If the sampling approach is used by the PPs, do the requirements specified agree with those stated in the appropriate standards?	EB86 Report Annex 4 §40a-i	DR	N/A	Ok	Ok
B.7.2.6. If the sampling approach is used by the PPs, is the population in the sampling plan clearly defined?	EB86 Report Annex 4 §40b	DR	N/A	Ok	Ok
B.7.2.7. If the sampling approach is used by the PPs, is the proposed sampling approach clear?	EB86 Report Annex 4 §40c	DR	N/A	Ok	Ok
B.7.2.8. If the sampling approach is used by the PPs, does the sampling approach comply with the description of the population?	EB86 Report Annex 4 §40c-ii	DR	N/A	Ok	Ok
B.7.2.9. If the sampling approach is used by the PPs, is the proposed sample size adequate to achieve the minimum confidence/precision requirements?	EB86 Report Annex 4 §40d	DR	N/A	Ok	Ok
B.7.2.10.If the sampling approach is used by the PPs, is the ex-ante estimate of the population variance needed for the calculation of the sample size adequately justified?	EB86 Report Annex 4 §40d	DR	N/A	Ok	Ok
B.7.2.11.If the sampling approach is used by the PPs, is the sample representative of the population?	EB86 Report Annex 4 §40e	DR	N/A	Ok	Ok
B.7.2.12.If the sampling approach is used by the PPs, is it identified how the sampling frame would be kept?	EB86 Report Annex 4 §40e-ii	DR	N/A	Ok	Ok

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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 PPs, are the methods of data collection clear and unambiguous?	EB86 Report Annex 4 §40f-i	DR	N/A	Ok	Ok
B.7.2.14.If the sampling approach is used by the PPs, are the procedures for the data measurements defined appropriately and clearly?	EB86 Report Annex 4 §40g	DR	N/A	Ok	Ok
B.7.2.15.If the sampling approach is used by the PPs, do the procedures for measurements adequately provide for minimizing non-sampling errors?	EB86 Report Annex 4 §40g	DR	N/A	Ok	Ok
B.7.2.16.If the sampling approach is used by the PPs, is the quality control and assurance strategy adequate?	EB86 Report Annex 4 §40g-i	DR	N/A	Ok	Ok
B.7.2.17.If the sampling approach is used by the PPs, are the proposed skill sets, qualifications and experience of the personnel to be engaged to conduct sampling adequate?	EB86 Report Annex 4 §40h-i	DR	N/A	Ok	Ok
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 EB101 Report Annex 1 §82a	DR	Please clarify the basis of stating N/A in section B.7.3. Further, the section does not provide much detail regarding the biogas measurement and associated data management.	CAR56	Ok
B.7.3.2. Has the PP clearly indicated the responsibilities and institutional arrangements for data collection and	GS-PDD-FORM Ver. 1.2	DR	The responsibilities and institutional arrangements for data collection and archiving in context of biogas is to be indicated.	CAR57	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
archiving?	EB101 Report Annex 1 §82c				
C. Duration and crediting period					
C.1. **Duration of project**					
C.1.1. **Start date of project**					
C.1.1.1. Has the start date of the project, in the format of DD/MM/YYYY been stated under section C.1.1 of the PDD?	GS-PDD-FORM Ver. 1.2 EB101 Report Annex 1 §85	DR	The start date is cited as 02/12/2014 corresponding to the construction agreement.	Ok	Ok
C.1.1.2. Has the PP described how this date has been determined?	GS-PDD-FORM Ver. 1.2 EB101 Report Annex 1 §85	DR	The start date is cited as 02/12/2014 corresponding to the construction agreement.	Ok	Ok
C.1.1.3. Has the PP provided evidence to support this date?	GS-PDD-FORM Ver. 1.2 EB101 Report Annex 1 §85	DR	Yes, the evidence to support the start date has been submitted.	Ok	Ok
C.1.2. **Expected operational lifetime of project**					

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
C.1.2.1. Is the expected operational lifetime of the project activity stated in years and months under section C.1.2 of the PDD?	GS-PDD-FORM Ver. 1.2 EB101 Report Annex 1 §86	DR	Yes, indicated as 10 years based on the commissioning date and remaining license period till 01/09/2026.	Ok	Ok
C.2. **Crediting period of project**					
C.2.1. **Start date of crediting period**					
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	The start date of the crediting period is indicated as 01/06/2020 in earlier PDD version changed later to 01/06/2022. Please refer to FAR-2	Ok	FAR-2
C.2.1.2. Have the PPs determined only one start date for the crediting period, even in cases of phased implementation of the proposed project activity?	EB101 Report Annex 1 §89	DR	Yes	Ok	Ok
C.2.1.3. Has the PPs used any qualifications to the start date, such as “expected”?	EB101 Report Annex 1 §90	DR	N/A	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	The total length of the first crediting period is 5 years.	Ok	Ok
D. Summary of Safeguarding Principles and Gender Sensitive Assessment					

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
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 PPs 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	The safeguarding principles that will be monitored have to be summarized including the mitigation measures added to the monitoring plan.	CAR58	Ok
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	The assessment that the project complies with GS4GG Gender Sensitive requirements has not been performed. Further, please provide evidence to demonstrate that the project concept and design cover the overall societal context from a gender perspective.	CAR59	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	Refer to CAR above	CAR59	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	Refer to CAR above	CAR59	Ok
D.2.4. Has an expert been involved for the Gender Safeguarding Principles & Requirements, where required?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR59	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	Refer to CAR above	CAR59	Ok
D.2.6. Does the project apply the Gold Standard Stakeholder Consultation & Engagement Procedure, Requirements & Guidelines?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR59	Ok
E. Summary of Local Stakeholder Consultation					
E.1. **Summary of stakeholder mitigation measures**					
E.1.1. Has the PP described the process by which comments from stakeholders have been invited for the project?	GS-PDD-FORM Ver. 1.2	DR	Please provide the summary of the LSC. Also, clarify and correct section E.1, wherein it is stated that, 'During the remote site visit under validation progress for renewal of crediting period, local stakeholders clearly stated that the solid and liquid fertilizers provided by this facility (the Project) contributed significantly to the production in their agricultural activities. Moreover, stakeholder has no negative comment on project activities. Remote site visit was held in 04 November 2021.'	CAR60	Ok
E.1.2. Has the PP conducted the stakeholder	GS-PDD-	DR	Yes	Ok	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
consultation in accordance with GS4GG Stakeholder Procedure Requirements and Guidelines?	FORM Ver. 1.2				
E.1.3. Has the PP demonstrated how due steps/actions were taken to appropriately engage stakeholders and solicit comment?	EB101 Report Annex 1 §94	DR	Refer to CAR above	CAR60	Ok
E.1.4. Has the PP invited comment from stakeholders in an open and transparent manner, in a way that facilitates comments to be received from local stakeholders and allows for a reasonable time for comments to be submitted?	EB101 Report Annex 1 §99 EB101 Report Annex 2 §132	DR	Refer to CAR above	CAR60	Ok
E.1.5. Has the PPs described the proposed project in a manner that allows the stakeholders to understand the project activity, taking into account confidentiality provisions of the applicable CDM M&Ps and requirements?	EB101 Report Annex 1 §101	DR	Refer to CAR above	CAR60	Ok
E.1.6. Has the PP identified the stakeholders that have made comments?	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR60	Ok
E.1.7. Has the PP provided a summary of the stakeholder comments in a complete and clear manner?	EB101 Report Annex 1 §105 EB101 Report Annex 2 §132f	DR	Refer to CAR above	CAR60	Ok

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Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
E.1.8. Has the PPs provided information demonstrating that all comments received have been considered?	EB101 Report Annex 1 §107	DR	Refer to CAR above	CAR60	Ok
E.1.9. Is the process on how the PPs taken into account of all comments received described in the PDD?	EB101 Report Annex 1 §107 EB101 Report Annex 2 §132g	DR	Refer to CAR above	CAR60	Ok
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	The relevant methods and all details of chosen methods for receiving continuous input/grievance mechanism have not been provided in the related tabular format.	CAR61	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 Ver. 1.2	DR	Refer to CAR above	CAR61	Ok
E.2.2.1. Continuous input / grievance expression process book	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR61	Ok
E.2.2.2. GS contact	GS-PDD-FORM Ver. 1.2	DR	Refer to CAR above	CAR61	Ok

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

Question	Reference	Means of Validation*	Findings, Comments, References and Document Sources	Draft Opinion	Final Opinion
F. Other Requirements					
F.1. **Forward action requests (FARs) identified during preliminary GS review and/or LSC review**					
F.1.1. Are there any FARs from the preliminary GS review and/or LSC review stages?	EB101 Report Annex 2 §36	DR	Please submit the preliminary GS review and LSC review documents.	CL-10	Ok

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Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
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	The safeguarding principles assessment has been completed for each principle using the relevant tabular format.	Ok	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
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	Please provide evidence to confirm the following: - working agreements with the individual workers. - how the project avoids community exposure to increased health risks and does not adversely affect the health of the workers and the community. - Please provide evidence to demonstrate that the project concept and design cover the overall societal context from a gender perspective	CL11	Ok
Appendix-2 Contact information of project participants					

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

Question	Reference	Means of validation*	Findings, comments, references and document sources	Draft opinion	Final opinion
1. Is the contact information of PPs 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 Participants' Response	Validation Team Conclusion
CAR-1 Please clarify why 'GHG Emissions Reduction & Sequestration' as well as 'N/A' has been checked.	1.15	**Response 1:** "N/A" has been removed in revised PDD	Review-1 Ok Closed (PDD has been revised)
CAR-2 Please clarify the basis of indicating the project cycle as 'Regular'.	1.16	**Response 1:** LSC meeting of the project and listing to GS system were done before the project started to operation which could be checked via provincial acceptance protocols date. Hence project indicated as "regular"	Review-1 Ok Closed (Clarified)
CAR-3 The project is indicated as a cogeneration project using biogas generated from cattle manure, chicken manure and agricultural wastes -via anaerobic digestion. The electricity would be exported to the Turkish national grid. It is indicated that the project activity reduces GHG emissions released from the anaerobic decay of organic waste. Please indicate the scenario existing prior to the implementation of the project activity about the referred organic wastes such as chicken manure and agricultural wastes collected from neighbouring waste sources and electricity export to grid too. Also, clarify about the greenfield dairy unit along with the biogas facility. Further, the quantum of waste being treated is also to be indicated.	A.1.1	**Response 1:** Related explanations are added to section A.1 in MR related with baseline situation prior to project activity. In addition, amounts of waste information is given. **Response 2:** The project owner works by taking waste from farms with a large number of animals in direct proportion to the facility capacity. These farms are the ones that keep the wastes in the lagoons in the base condition. In summary, the project complies with the methodology used, as the project owner receives waste from farms that keep the wastes in the lagoons in the baseline state and related statement in PDD is revised accordingly.	Review-1 It is indicated in the PDD that 'Prior to the project activity, baseline situation, cattle, chicken manure generated at farms commonly released to natural water bodies or lagoons and agricultural wastes left in agricultural lands commonly'. Please note that the methodology applicability states, 'This methodology is applicable to manure management on one or multiple livestock farms where the existing anaerobic manure treatment system. Review-2 Ok Closed (PDD has been revised)
CAR-4	A.1.2	**Response 1:**	Review-1

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
It is indicated that in the baseline scenario manure from the farms were being left to decay in anaerobic lagoons or spread over the fields. However, baseline scenario for other waste types is not clarified. Please indicate the baseline scenario about the referred organic wastes such as chicken manure and agricultural wastes and electricity export to grid too.		Related explanations are added to section A.1 in MR related with baseline situation prior to project activity with the response of previous CAR. **Response 2:** Related explanation is added to Section A.1 by referring the applied methodology in revised PDD.	The scenario existing prior to the project activity and baseline scenario for each waste type has to be clearly depicted. Also acknowledging the methodology applicability. Review-2 Ok Closed (PDD has been revised)
CAR-5 Please indicate briefly as to how the project contributes to the sustainable development of the Host Party.	A.1.4	**Response 1:** Related explanations are added to section A.1 with the response of previous CAR. **Response 2:** By trying to understand the review, electricity generated by the project increased the renewable energy generation of Turkey. So this situation does not contribute to the sustainable development of Turkey? Mentions of other SDG Goals are added to Section A.1.	Review-1 Only reference to SDG 7 has been cited, it is not indicated how the project contributes to the sustainable development of the Host Party. Review-2 Ok Closed (PDD has been revised)
CAR-6 Please clarify and correct the statement in section A.1.1 of the PDD wherein it is indicated that, 'This is the second crediting period of the project…'. Also, the reference to GS4GG version 1.1 is to be updated.	A.1.1.1	**Response 1:** The statement is already deleted in the version of PDD dated as 15.10.2021 shared with you previously. It may be confusion on that. Please keep in mind that the PDD dated as 15.10.2021 is the latest PDD shared before this revision round.	Review-1 Ok Closed (PDD has been revised)
CAR-7 Please clarify and correct the stated coordinates of the project area as the same could not be confirmed with the EPDK licence.	A.2.1.6	**Response 1:** Checked and corrected	Review-1 Ok Closed (PDD has been revised, coordinates are as in the EPDK license)
CAR-8 The details about the technology being implemented	A.3.1	**Response 1:** Detailed information on anaerobic digesters added to Section A.3.	Review-1 Ok Closed (PDD has been revised)

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
as part of the project including the technical description of the key equipment is to be provided. Please clarify about the anaerobic digestors too and provide the corresponding supporting documents for the equipment too.		The reference document is the EIA report of the project which is shared before (page 14)	
CAR-9 Please confirm that the project activity is a greenfield project, however, is also utilizing waste from other existing farms too.	A.3.2	**Response 1:** Related explanation is added to Section A.3 **Response 2:** Explanation in Section A3 about wastes is corrected.	Review-1 Please correct the description in section A.3 with regards to the stated baseline situation for various waste. Review-2 Ok Closed (PDD has been revised)
CAR-10 Please clarify on the process of waste management for chicken manure and agricultural wastes existing prior to the project activity. Also, indicate the quantity of respective waste type that would likely be treated at the facility.	A.3.3	**Response 1:** Related explanation is added to Section A.3 which is also added to Section A.1 as per previous CARs. **Response 2:** Explanation in Section A3 about wastes is corrected.	Review-1 Please correct the description in section A.3 with regards to the stated baseline situation for various waste. Review-2 Ok Closed (PDD has been revised)
CAR-11 Please provide the list of facilities, systems and equipment in the baseline scenario, as subsequently established in section B.4 of the PDD.	A.3.7	**Response 1:** List of facilities (farms) in the baseline scenario is already given in Section B.3 "project boundary" part of the PDD. In terms of system there is no system n baseline situation as explained that the waste was left in decay order in nature. Hence on these aspects there is no information necessary to add to section A.3	Review-1 Ok Closed (PDD has been revised)
CAR-12 Please clearly explain how the same types and levels	A.3.8	**Response 1:** There exist several cattle farms near the plant. Manure from	Review-1 Ok Closed (PDD has been revised)

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
of services provided by the project activity would have been provided in the baseline scenario.		these farms will be used in biogas plant to generate electricity and output from digesters will be used as fertilizer in nearby agricultural land as free. Before the project activity farm owners bought the inorganic fertilizer from related market which is costly. Hence project activities provide a great service which is not present in baseline situation. In fact, there is no any service (?) in baseline situation which could be beneficiary for nearby farms and agricultural lands. That is why the local stakeholders are very pleasant within the project activity as they clearly stated in online site visit/interview. Related explanation is added to Section A.3	
CAR-13 Please include information about the age and average lifetime of the equipment based on manufacturer's specifications and industry standards, and existing and forecast installed capacities, load factors and efficiencies	A.3.9	**Response 1:** "Operational lifetime is estimated as 11 years stating with 01/09/2016 based on the date given in license till 31/08/2026. License amendments will be made in the future periods in order for the project to continue its operation after this date. Related explanation is also added to Section C of revised PDD." This statement is added tor evised PDD. In addition, Gas engines operate with 40.2 % efficiency and waste heat boilers with 48% efficiency. Technical specification sheets of the gas engines and boiler have already been provided previously. Please check the e-mail sent on 15.10.2021.	Review-1 Ok Closed (PDD has been revised)
CAR-14 Please indicate as to how the project contributes towards SDG 7, SDG 8, SDG 12 and SDG 13.	A.3.10	**Response 1:** Is this the matter of Section A.3? Anyway the info is added.	Review-1 Ok Closed (PDD has been revised)

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
CAR-15 Please correct the statement '…estimated emission reduction of the proposed project activity is 83,898 tCO2 equivalent per year…'. The value is inconsistent with other parts of the PDD.	A.4.2	**Response 1:** The statement is already revised in the version of PDD dated as 15.10.2021 (could be checked via e-mails) shared with you previously. It may be confusion on that. Please keep in mind that the PDD dated as 15.10.2021 is the latest PDD shared before this revision round.	Review-1 Ok Closed (PDD has been revised)
CAR-16 Please indicate only the relevant and applied tools. The reference to the tool 'Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period' is inappropriate too. Further, the additionality and baseline related tools 'Combined tool to identify the baseline scenario and demonstrate additionality', transportation of waste among others are missing.	B.1.2	**Response 1:** Unrelated tool is deleted and missing one is added to revised PDD	Review-1 Ok Closed (PDD has been revised)
CAR-17 It is indicated that '' The proposed project activity is a Greenfield project which consists of treatment of animal manure via anaerobic digestion collected from neighbouring farms and organic wastes from nearby facilities to produce methane through utilizing biogas for electricity generation.' However, the justification to the applicability condition does not indicate about the existing anaerobic manure treatment system. Please clearly indicate about the clause '..multiple organic matters that would have otherwise been left to decay anaerobically in an animal waste management system (AWMS) or a solid waste disposal site	B.2.4.1	**Response 1:** Related clause is corrected. The Project is Greenfield Project and there is no any other manure management system and so supporting documents (awms) in terms of baseline scenario. **Response 2:** To correct the explanation, there is no central treatment system that the project created one to the region at the baseline situation. Related part of B.2 is corrected accordingly.	Review-1 The issue has yet not been corrected. Review-2 Ok Closed (Clarified)

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
(SWDS)'. Also, associated supporting documentary evidence are to be provided.			
CAR-18 Please clarify and correct the applicability condition as the methodology only indicates 'Farms where manure is not discharged into natural water resources (e.g. rivers or estuaries);'. Further, provide documentary evidence to confirm that manure is not discharged into natural water resources from the farms.	B.2.5.2	**Response 1:** Related explanation on this matter is added to Section A.1 also as per previous CARs. Manure is collected in lagoons is baseline situation. Related site photo is shared within this document as evidence of baseline situation.	Review-1 Ok Closed (PDD has been revised)
CAR-19 It is indicated that Declarations will be provided during validation to DOE. Please provide the declaration that the VERs shall be claimed by Enfas only. Also, correct the statement in the PDD.	B.2.5.11	**Response 1:** This decleration was shared on 15.10.2021 (could be checked via e-mails) previously. It may be confusion on that. Please keep in mind that the PDD dated as 15.10.2021 is the latest PDD shared before this revision round and lots of the supporting documents were shared on same date and e-mail. To reminders the documents is to be shared again with this round. **Response 2:** If you pay attention to the sentence written in the declaration, the word "only" emphasize that only Enfaş A.Ş.. could claim VERs of the project. The same text was used and accepted in the validations of other similar projects (eg. Aksaray Biogas Project). **Response 3:** The self decleration of other parties is to be provided with this document	Review-1 The document 'Tire Biogas Project_Decleration on VERs of the Project' has been received. However, as per the clause 'Other parties involved must sign a legally binding declaration that they will not claim CERs from the improved animal waste treatment practices', has not been addressed. Review-2 The self-declaration is neither sufficient and nor the reference of its acceptance in earlier projects. Review-3 Ok Closed (Document submitted)

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
CAR-20 Please present a flow diagram of the project boundary, physically delineating the project activity.	B.3.2	**Response 1:** Related diagram already been given in Section A.3. The same diagram also added to Section B.3 in this round.	Review-1 Ok Closed (PDD has been revised)
CAR-21 Please include a flow diagram also depciting the equipment, systems and the emission sources and GHGs included in the project boundary and the data and parameters to be monitored.	B.3.3	**Response 1:** Please see the response of previous CAR. Details of equipments are present in Section A.3 of PDD	Review-1 Ok Closed (PDD has been revised)
CAR-22 It is indicated that the boundary of the proposed project activity encompasses the physical and geographical sites of the waste producers which are designated cattle farms, yeast production facility and frozen vegetable production facility. Boundary also encompasses the biogas production plant and the farms and facilities where the solid and liquid fraction(slurry) of the organic fertilizers transferred to. The inclusion of the onsite flare or energy is not indicated though. Please also correctly present the table depicting the Emissions sources included in or excluded from the project boundary, as per the methodology.	B.3.9	**Response 1:** - **There is no such a statement in the PDD of this project "**waste producers which are designated cattle farms, yeast production facility and frozen vegetable production facility". On the other hand necessary additions are placed in this part in revised MR - Information on flare technology present on site is given already (please check the PDD dated 15.10.2021 before the validation document and shared with you) - Please see the responses above **Response 2:** The table in B.3 revised accordingly **Response 3:** Related table is further revised.	Review-1 The table presenting the source of emissions and associated justification is to be checked and corrected. For e.g., the justification for baseline scenario 'Source 2: Emissions from electricity generation' for CO2 is incorrectly stated. The entire table is to be correctly presented. Review-2 Please correct the table further as the inclusion and exclusion with justification is not done appropriately for electricity generation and thermal energy, acknowledging the emission reductions being claimed for the same. Review-3

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
			Ok Closed (PDD has been revised)
CAR-23 Please provide the documentary evidence for the designated farms and facilities wherefrom the organic waste is collected, also confirming the road itineraries.	B.3.9.5	**Response 1:** Farm agreements were shared on 15.10.2021 via e-mail previously as evidence. The coordinates (which is the basis of road distance to the project site indicated in PDD) are also present in PDD dated 15.10.2021 (which is latest PDD before the validation protocol gathered by us and shared with you) Please check this situation there should be a missing point on that manner.	Review-1 Ok Closed (Farm agreements checked from the document 'Animal Farm Agreements which include Animal Number_Tire Biogas Project' and distance through coordinates)
CAR-24 Please provide a clear diagrammatic representation of the project scenario including the waste treatment steps as well as final disposal; use of methane and also the auxiliary energy to run the project treatment steps; and the fraction of volatile solids degraded within the project boundary in the pre-project situation before disposal.	B.3.11	**Response 1:** Figure 3 of the PDD clearly show the project diagram. This is the just any other project of ENFAŞ group with same technology and same diagram such as Aksaray Biogas Project. There is no additional diagrammatic representation to share.	Review-1 Ok Closed (PDD has been revised)
CAR-25 Please also include the co-ordinates of the farms wherefrom the organic waste is being sourced.	B.3.12	**Response 1:** Please see the response of CAR-23	Review-1 Ok Closed (PDD has been revised)
CAR-26 Please provide the road distances of the itineraries between the farms from which waste is sourced and the manure central treatment plant using information from official sources.	B.3.12.2	**Response 1:** Please see the response of CAR-23 **Response 2:** Added with extra explanation given below. *"Moreover the distances of each farm to project site are given in table above. To be conservative the farthest point of each district is chosen on map to the project site for each*	Review-1 Please state the road distance too in the table besides the coordinates column. Review-2 Ok Closed (PDD has been revised)

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
		farm where located in."	
CAR-27 As per the applied methodology, baseline scenario should be identified from the perspective of the owner of central treatment plant, as well as from the perspective of the multiple livestock farms owners. Please clarify and correct the presentation in section B.4 of the PDD accordingly.	B.4.2	**Response 1:** There is no central treatment plant in baseline scenario. Please check the responses of other related CARs. Hence there is no need for correction in this part.	Review-1 Ok Closed (The baseline scenario in case of greenfield facility has been cited and also that the existing livestock farms have anaerobic lagoons).
CAR-28 As per the applied methodology, the baseline scenario and demonstration of additionality is to be performed using the "Combined tool to identify the baseline scenario and demonstrate additionality". Acknowledging the existing facilities of waste management at the respective farms, please clarify the reference to greenfield facilities.	B.4.3	**Response 1:** The term "existing facilities" are deleted in revised PDD since there is no similar waste management system (awms) project were on the region before this project.	Review-1 Ok Closed (The baseline scenario in case of greenfield facility has been cited and also that the existing livestock farms have anaerobic lagoons).
CAR-29 The scenarios to be presented taking into account the existing and greenfield facility are not presented in accordance with the methodology.	B.4.8	**Response 1:** The term "existing facilities" are deleted in revised PDD since there is no similar waste management system (awms) project were on the region before this project. The scenarios for greenfield facility taking into account in section B.4 and B.5	Review-1 Ok Closed (The baseline scenario in case of greenfield facility has been cited and also that the existing livestock farms have anaerobic lagoons).
CAR-30 The PDD does not present the case of managing the manure in the existing facilities, with the complete set of existing/possible manure management systems listed in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories (Volume 4,	B.4.18	**Response 1:** This info is already given in the version of PDD dated as 15.10.2021 (could be checked via e-mails) shared with you previously. It may be confusion on that. Please keep in mind that the PDD dated as 15.10.2021 is the latest PDD shared with you before validation protocol.	Review-1 Ok Closed (PDD has been revised)

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
Chapter 10, Table 10.17).			
CAR-31 The alternatives for electricity and heat are not presented in accordance with the methodology in the PDD. In addition to the alternative baseline scenarios to be identified for managing the manure, alternative scenarios for the use of gas generated from an anaerobic digester (biogas) shall also be identified if this is an aspect of the project activity.	B.4.22	**Response 1:** Biogas only used for electricity generation within project activity. That is why any other alternatives are not identified. A sentence is added to emphasize the situation. **Response 2:** Related statement is revised. **Response 3:** Revised as H4 in related section.	Review-1 For heat the text after the alternatives H1 to H7 is stated incorrectly and not in accordance with the methodology wherein reference to H5 is made and 1st CP is referred. Review-2 The section is not consistent with other parts of the PDD with the statement 'In terms of this project baseline scenario H3 is valid…'. Where, H3 corresponds to Heat generation in existing or new renewable based cogeneration plant(s). Review-3 Ok Closed (PDD has been revised)
CAR-32 The section on prior consideration has not been included.	B.5.1	**Response 1:** Related section is already present in page 42 of PDD **Response 2:** An statement is added to related section.	Review-1 It is indicated that 'N/A. The project is not retroactive project'. Please provide the timelines and actions taken towards securing carbon finance.

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
			Review-2 Ok Closed (PDD has been revised)
CAR-33 Reference to 1st CP in context of alternatives for heat is to be clarified and corrected. Further, the identified mandatory laws and regulations have been listed; however, the list does not contain regulations on waste management.	B.5.1.10	**Response 1:** Alternative "H5: Heat generation in existing or new on-site or off-site renewable energy based boiler(s) or air" is indicated instead of "H4" as a correction. In addition "waste management regulation" dates as 2015 added to list in revised PDD. **Response 2:** Revised **Response 3:** Revised as H4 in related section.	Review-1 For heat the text after the alternatives H1 to H7 is stated incorrectly and not in accordance with the methodology wherein reference to H5 is made and 1st CP is referred. Review-2 The section is not consistent with other parts of the PDD with the statement 'In terms of this project baseline scenario H3 is valid…'. Where, H3 corresponds to Heat generation in existing or new renewable based cogeneration plant(s). Review-3 Ok Closed (PDD has been revised)
CAR-34 A 19-year horizon has been selected to evaluate the project, but the project owners do not justify the investment horizon in the PDD.	B.5.1.38	**Response 1:** Please see the response of CAR-13 **Response 2:** This is the similar situation such as in Aksaray Biogas Project. The license of the project referred to 10 or 11 operation years; however, this time period is not logical to investment return for	Review-1 The response is unclear. Review-2 Ok Closed (Clarified)

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
		any similar project. Hence, all kind of similar projects and this project apply to license amendment to longer the license period during the ending periods of license. That is why investment horizon is evaluated for 19 years since the project owners plan is in that way .	
CAR-35 There is no documentation on the land cost, admin cost, revenue generation among others, please clarify.	B.5.1.53	**Response 1:** Project revenues belonged to electricity sold to national grid and electricity fee value is taken into consideration during IRR analyses and given in excel document also. **Response 2:** IRR calculations consist OPEX perspective which includes admin cost. Revised IRR sheet (compared to share in Feb 2021) provided in October 2021, please check the related e-mails. The documentation related with IRR also shared in Feb 2021 and are to be provided again to remember with this document. **Reponse 3:** Project owner provides updated docs on adm cost and land cost. IRR calc. revised accordingly and supplementary docs are to be provided with this document.	Review-1 The response is unclear, and the revised IRR sheet too has not been received. Review-2 Please resubmit the requested documents. Review-3 Ok Closed (Documents submitted)
CAR-36 Please clearly depict the output from the application of the steps in the common practice tool in the PDD including values for Nall and Ndiff. The step 3 is not correctly applied.	B.5.1.68	**Response 1:** Related part is corrected in revised PDD. **Response 2:** Sub-step 4 is revised. **Response 3:** Revised accordingly	Review-1 The calculation in sub-step 4.4 has not been presented correctly. Review-1 The calculation in sub-step 4.4 has not been presented correctly. It still indicates 'N_{all}-N_{diff}= 0 – 0'

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
			Review-3 Ok Closed (PDD has been revised)
CAR-37 Please clarify and correct on the following points: - The grid emission factor has not been calculated using the correct weights for OM and BM. Also, acknowledging that the grid emission factor value latest official emission factor of Turkey has been used in the project depending on the project type has been published by the Ministry of Energy and Natural Resources; - The average number of animals and respective types considered in the calculation of baseline CH4 emissions are to be clarified; - Also clarify which option as per the methodology has been considered for Annual volatile solid excretions for livestock LT (VS_{LT}) and annual average number of animals of type LT (N_{LT});	B.6.1.1.1	**Response 1:** Corrected OM, BM, and CM were already given in the version of PDD dated as 15.10.2021 (could be checked via e-mails and corresponding excel document dated as 15.10.2021 similarly) shared with you previously. It may be confusion on that. Please keep in mind that the PDD and excel calculation doc dated as 15.10.2021 are the latest PDD shared with you before validation protocol. Similarly, farm agreements with animal numbers were also shared in 15.10.2021 in the same e-mail with PDD and excel calc. doc. Moreover, country specific data is used for VSlt and Nlt as per methodology and also similar with another validated project "aksaray biogas plant". The explanation is present in tables of section B.6.2. **Response 2:** The related calculation is deleted from baseline tab . Since other parts of the PDD explains that the project handle 95 tonne of waste daily and breakdown of this amount clearly stated in section A.1	Review-1 The grid emission factor has been revised. However, the calculation of yearly manure amount for cattle and chicken is done incorrectly in the ER sheet 'Baseline emission' tab. Review-2 Ok Closed (ER sheet revised)
CAR-38 Please clarify and correct on the following points: - Which option as per the methodology has been considered for project N2O emission from animal manure; - The project emissions from consumption of electricity is to be considered only if it not related to the anaerobic digester;	B.6.1.1.2	**Response 1:** **Please check the explanation in "baseline emissions" part of the PDD** ***"NOTE**: $E_{N2O,D,y}$ and $E_{N2O,ID,y}$ emissions equations for the baseline emissions ($BE_{N2O,y}$ page 11 of The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reductions from Manure Management Systems*	Review-1 Ok Closed (clarified)

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
- For 'project emissions from manure transportation' it is indicated that 'Option A: Monitoring fuel consumption' as per the "Tool to calculate project or leakage CO2 emissions from fossil fuel combustion" is used. Please clarify the basis of arriving at the fuel consumption estimate. Further, the reference to the version of the tool is to be corrected.		*and Municipal Solid Waste, December 2013) and project emissions ($PE_{N2O,y}$ page 15 of The Gold Standard Revised Consolidated Baseline Methodology for GHG Emission Reductions from Manure Management Systems and Municipal Solid Waste, December 2013) calculation equations are given same in the Gold Standard's consolidated baseline methodology. Same situation is present in CDM Methodology ACM0010 (ver.08) that consolidated GS Methodology is based on. This would led emission calculations as zero since baseline and project emissions become equal within this calculation pathway. "* This is the way which is also used in other similar and validate projects such as Aksaray Biogas Plant Project. - Project owner will provide all the electricity consumption of Project site related with auxillary units, digesters, etc. and this data is to be used for Project emissions to be on the safe side. - 'Project and leakage emissions from road	

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
		transportation of freight', Version 01.1.0[4], is applied to the proposed project activity in terms of transportation activity and related Project emissions. Please check the Transportation emissions part of the PDD. Mentioned tool is already referred.	
CAR-39 It is indicated that 'project activity does not involve land application of the treated manure or composting'. Please clarify what is happening to the treated manure and correct the PDD accordingly.	B.6.1.1.3	**Response 1:** There exist several cattle farms near the plant. Manure from these farms will be used in biogas plant to generate electricity and output from digesters (both liquid and solid outputs) will be used as fertilizer in nearby agricultural land as free. Before the project activity farm owners bought the inorganic fertilizer from related market which is costly. Hence project activities provide a great service which is not present in baseline situation. This situation indicated in several parts of the PDD such as Sections A.1, A.3 and B2 **Response 2:** Statement in PDD is revised in related paragraph. The usage of solid and liquid fertilizer of this project is exactly same as n Aksaray	Review-1 Page 71 of the PDD indicates 'since the proposed project activity does not involve land application of the treated manure or composting, $LE_{PJ,N2O,y}$, $LE_{PJ,CH4,y}$ and $LE_{Comp,y}$ shall be accounted as zero'. Please clarify and correct accordingly as this is in context of treated manure which is earlier indicated for use as fertilizer. Review-2 Ok Closed (PDD is revised)

[4] https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-12-v1.1.0.pdf

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
		Biogas Project. Hence there is no need for leakage calcuations.	
CAR-40 The grid emission factor fixed ex-ante has not been included in the section B.6.2. Please clarify and correct accordingly.	B.6.2.1	**Response 1:** Added. **Response 2:** Parameter for boiler efficiency is added to revised PDD. For the reference of default methane fraction; https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-14-v2.pdf In the tool=> parameters not to be monitored=> parameter I Related reference added to PDD Moreover, default value for flare efficiency is also indicated with reference tool	Review-1 The latest grid EF has been included in the revised PDD. However, please provide the reference to the default value of methane content in biogas and also correct the purpose of data. Further, other parameters that too are fixed ex-ante are to be included in the section for e.g., if boiler efficiency is being fixed, among others. Review-2 Ok Closed (PDD is revised)
CAR-41 The steps taken and equations applied to calculate the baseline, project, leakage and net outcomes and comply with the requirements of the methodology including applicable tool(s) has not been presented in section B.6.3 of the PDD. Further, the grid emission factor is to be corrected. Furthermore, the basis of arriving at the emission reductions from heat are to be clarified along with the basis of the efficiency of heat generation equipment.	B.6.3.1	**Response 1:** - There is lots of equations used in section B.6.3 and all of them referred to methodology and tool in the paragraphs below and above. Within these equations it seems to be that there is no missing parameter or calculation step. Please be specific while try to point such things if you realize anything, otherwise all the calculations check is just time wasting for all the parties involved in this work - For the emission factor please see the response of CAR-37 - Please see the baseline heat calculation of excel document	Review-1 The latest grid EF has been included in the revised PDD, however, there are other points to be clarified and corrected. 1) The basis for arriving at the MCFj is to be clarified and corrected accounting for the temperature, system and cattle and poultry manure. The PDD indicates that

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
		Response 2: 1)The reference link and screenshot for the annual mean temperature of İzmir Province in where the project operates is revised. Data provided by MGM again. 2) Ok. MCF multiplied with 0.94 and resultant 0.71 used in calculations for baseline emission amount and rest of the other related formulas 3) The reference is updated as "IPCC 2019 Refinement, Chapter 10, Volume 4 Table 10.16" both in excel and revised PDD. The data for cattle manure kept same as it is same in 2019 refinement document. For poultry tha data is revised as "0.36" (to be conservative) with the guidance of same document. 4) The related link just lately argued for Aksaray Biogas Project Validation and exactly the same values, references used for this document and calculations. 5) Please see the response of CAR-37 6) The value is revised and 92% is used in calculation with revised reference. The fix-ante parameter table is also added to PDD. **Response 3:** 1) Revised. Excel and PDD are now consistent. 2) Related explanation for correction calculation is added to "any comment" raw of related table in B.6.2 **3)** Tables about the parameter "$B_{0,LT}$ " were present in B.7 with revisions. Since these data is fixed-ante, the tables removed from section B.7 and added to section B.2 which reflects the same data with excel document.	the MCF value of 0.76 has been obtained from 2019 IPCC Refinement, Table 10.17, p. 10.74 (uncovered anaerobic lagoon for 17.8 °C, for Tire Province Conditions. Whereas the excel sheet tab 'Baseline emissions' cell G8 indicates 'Annual average temperature is 12°C for Aksaray District of Turkey according to data provide by MGM'. 2) Further, as per the methodology, A conservativeness factor should be applied by multiplying MCF values (estimated as per above bullet) with a value of 0.94, to account for the 20% uncertainty in the MCF values as reported by IPCC 2006. 3) The value and source of the parameter '$B_{0,LT}$' for cattle and poultry is to be clarified and corrected. The excel sheet tab 'Baseline emissions' cell F10 and F11 indicates 'IPCC 2006 Table 10A-9, p.10.77,Chapter 10, Volume 4' and 'IPCC 1996, CH4 AND N2O EMISSIONS FROM LIVESTOCK MANURE , Table 4'

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			respectively. 4) The basis for arriving at the value of $VS_{LT,y}$ is indicated to be following Option 1 using published country specific data. However, it's not clear as the EIA report link is not opening with request getting rejected. 5) The yearly manure amount for cattle and chicken is calculated incorrectly in the excel sheet tab 'Baseline emissions' cell C69 and C70. 6) The option for arriving at the boiler efficiency is not indicated in the PDD. Further, the value taken in the ER sheet as 85% is not in accordance with the tool 'TOOL09: Determining the baseline efficiency of thermal or electric energy generation systems, Version 03.' With reference to the default value of 92%. Review-2 1) The excel sheet and PDD are still inconsistent. Please address the full point. 2) The ER sheet indicates

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			multiplication with 0.94, however, the PDD does not reflect the same in section B.6.2. 3) The ER sheet is revised, however, the PDD does not reflect the same in section B.6.2. 4) Ok closed (clarified) 5) Ok closed (ER sheet revised) 6) Ok closed (ER sheet and PDD revised) Review-3 Ok Closed (PDD and ER sheet has been revised addressing aforesaid points)
CAR-42 The equation 1 as per the applied methodology has not been indicated.	B.6.3.10	**Response 1:** Added to section B.6.3.	Review-1 Ok Closed (The PDD has been revised)
CAR-43 The baseline emissions associated with electricity generation (BEEC,y) are to be updated with the change in the grid emission factor.	B.6.3.15	**Response 1:** Please see the response of CAR-37	Review-1 Ok Closed (The PDD has been revised)
CAR-44 The options for the calculation of project emissions are clearly indicated. However, the values are to be corrected for project emissions from use of electricity for change in grid emission factor. Further,	B.6.3.17	**Response 1:** For the emission factor, please see the response of CAR-37 A new statement is added to revised PDD (section B.3) and related transportation calculations are revised in both MT	Review-1 1) The project emissions from anaerobic digestor are stated inconsistently in the PDD and ER sheet as 2,275 and 2018

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provide the documentary evidence that for this project average return distance between the origin and the destination is 10 km.		and PDD. "The furthest farm to the project site is as it could be checked from the coordinates given above. To be on the safe side the longest distance used for the project emissions due to transportation of all wastes. In fact, agricultural wastes are collected from nearby farms (in Tire district) however, to simplify the calculations and safe calculations the longest root value is also used for the transportation of agricultural wastes and related project emissions. Details could be checked via excel document of the project." Moeover according to EIA report of the Project shared with you before, Project has 95 tonne waste capacity (consisting both manure and agricultural wastes) for a day and this value used in Project emissions due to trans. Calc. As it could be chehcked from the excel document dates as 15..19.2021. **Response 2:** - PEad is revised as 1,897 as per revised project calculations due to changed (corrected) MCF - Related statements in PDD is revised.	respectively. 2) The project emissions from transport the quantity of waste is stated inconsistently in the PDD and ER sheet. Review-2 Ok Closed (The PDD has been revised)
CAR-45	B.6.3.18	**Response 1:**	Review-1

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Please clarify on the statement 'Proposed project activity does not involve land application of treated manure, or composting process, emissions according to these emissions accounted as zero'. Further details on the same are to be included in the PDD too.		There exist several cattle farms near the plant. Manure from these farms will be used in biogas plant to generate electricity and output from digesters (both liquid and solid outputs) will be used as fertilizer in nearby agricultural land as free. Before the project activity farm owners bought the inorganic fertilizer from related market which is costly. Hence project activities provide a great service which is not present in baseline situation. This situation indicated in several parts of the PDD such as Sections A.1, A.3 and B2 **Response 2:** As earlierly stated in Section A.3; *"The transport of the collected manure from the farms will be achieved by totally confined trucks. The transported manure will be directly transferred to the raw material pond without any storage time. Collected manure then fed to the fermenters via leakage proof pipes and biogas capture in the fermenters"* Hence there is no need for leakage emission calculation due to waste transportation The waste collection and solid&liquid fertilizer usage exactly	As indicated earlier in the PDD that the treated manure is used as fertilizer, so the statement in the PDD is to be corrected and leakage emissions due to any incremental distance should be accounted. As for the project emissions, a distance of 129 km has been considered, it could be presumed that similar distance is also in case of leakage emissions. Review-2 Ok Closed (Clarified)

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
		same as in Aksaray Biogas Project. Both of these Projects use same Project diagman and operation relatedly and both of this belonged to same Project owner. Also please see the response of CAR-39.	
CAR-46 Yes, the reference to equation 34 in the methodology has been indicated. However, please clarify as to how it is ensured that emissions due to agricultural waste is not taken into account for baseline emission calculation as per applied methodology.	B.6.3.19	**Response 1:** - ***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*" Under the baseline emission calculations agricultural wastes is not taken into account as per methodological criteria; however, project emissions due to these wastes are taken into consideration for the project such as emissions caused due transportation in revised PDD and Ver Calc. excel document. As it could be checked from the baseline emission calculations, only the animal number were taken into account. There is no parameter and formula or calculation related with the amount and type of agricultural wastes both in excel and PDD document.	Review-1 Ok Closed (The PDD has been revised)
CAR-47 The values are to be updated in section B.6.4 based on previous comments and also the decimal places are to be removed.	B.6.4.1	**Response 1:** Updated **Response 2:** Revised accordingly with updated calculations	Review-1 The values are to be updated in section B.6.4 based on previous comments.

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			Review-2 Ok Closed (The PDD has been revised)
CAR-48 The relevant data/parameters should be included following the order in the methodology and applied tools. Also, the format as per the PDD template is to be correctly applied.	B.7.1.2	**Response 1:** Checked and updated **Response 2:** 1)Done as per revised calculations 2)In the tab "baseline heat" of excel document. The 12 months period heat transfer data was given already which was provided by project owner *"Steam provided To Dairy Factory By Project (Between 01/09/2020 and 31/08/2021 for 12 months period)"* and this data was used for the quantity of heat and related emission reduction calculations. Related additions were done to parameter in B.7 for heat issue. 3) The statement below is added to related parameter table *"Project has monitoring equipments "a biogas meter" on wwtp line. The biogas records of this meter and related electricity generation is to be excluded from the emission reduction calculations."* Please also see the response of CAR-52 *4)*The data provided by Project owner. Project owner use calibrated device to measure the data and related calibration info added to table of the parameter in revised PDD *5)*This way of presentation should also be ok since similar approach was used in similar validated projects.	Review-1 The following points are to be addressed: 1) The values are to be updated in section B.6.4 based on previous comments. 2) Further, the basis for the net quantity of heat is unclear too. What is the source of data, is it measured from the heat received by the heated process; or calculated on the basis of measurement of the volume of biogas captured and used for heat generation. 3) Furthermore, the parameter 'Vf (coming from wastewater treatment plant)' too is unclear, with reference to WWTP. 4) Also, the parameter 'Vi, t, db' Volumetric fraction of greenhouse gas i in a time interval t on a dry basis with a value of 59% is to be clarified. 5) The multiple tables for the parameters '$N_{AA,LT}$' across the

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		*6)*Revised in PDD and excel document *7)*Explanation is revised in related table as below; *"No manure disposal to outside the project boundary since all the manure transported to project site is source of energy for the project owner. Hence there is no such disposal on project site."* Response 3: **4)** 59 % corrected as 60 % in excel document. **6)**Revised as 17.9 Celcius **7)** As noted earlier, since the proposed project activity does not involve composting, LEComp,y shall be accounted as zero. Moreover, the solid and liquid digestate used as fertilizer in nearby agricultural land as free and this materials are not used/stored in any other conditions on land. The usage of digestate as fertilizer by nearby farms are clearly declared during site interview by local stakeholders. Hence, $LE_{PJ,\ N2O,y}$, $LE_{PJ,CH4,y}$ shall be zero. This statement is also present in PDD. The parameter "Qdm" is stated as "*Mass of manure disposed outside project boundary*". However, in this project owner does not have a direct soil application or disposal of treated manure (or could be called as digestate). Digestate is given as free fertilizer so it is used as a value and this approach could not be called as disposal. Therefore, there is no need to monitor the treated manure for this project. Exactly the same situation is valid for Aksaray Biogas Project. Related explanation is added to Qdm table (any comment raw) in PDD also.	different farms could be bundled in one with table in table for respective farms for the values. 6) The temperature values are reported inconsistently as 17 and 12 degrees. 7) The reference to Qdm is to be clarified. Review-2 1) Ok Closed (PDD revised) 2) Ok closed (Clarified and PDD revised) 3) Ok closed (Clarified) 4) The default fraction of methane has been indicated as 60% and the fraction is also indicated as 59% in B.7. Please clarify and correct accordingly. 5) Ok closed (Multiple tables retained) 6) The excel sheet still has reference to 12 degrees in cell G8 of baseline emission tab. 7) The treated manure (after digestor) and its soil application is to be monitored.

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			Review-3 Ok Closed (PDD and ER sheet has been revised addressing aforesaid points)
CAR-49 The row of value(s) applied is missing in the tables presented in section B.7.	B.7.1.7	**Response 1:** Raws and values are added to each table	Review-1 Ok Closed (The PDD has been revised)
CAR-50 The description of calibration procedures for the monitoring equipment are to be included, in particular for the electricity generation and biogas flow and methane content therein.	B.7.1.10	**Response 1:** Relation explanations are added to related tables in terms of calibration. In terms of methane content, additional fix-ex ante parameter added to section B.2 **Response 2:** Please see the "baseline emissions" tab of excel document In this tab; - Temperature of the gaseous stream in time interval t - Absolute pressure of the gaseous stream in time interval t And - Volumetric fraction of greenhouse gas i in the gaseous stream in a time interval t on a dry basis Provided by project owner and rest of it belonged to formula stated by related tool. **Response 3:** 59 % corrected as 60 % in excel document.	Review-1 The basis of methane content in the biogas is to be clarified. Review-2 The default fraction of methane has been indicated as 60% and the fraction is also indicated as 59% in B.7. Please clarify and correct accordingly. Review-3 Ok Closed (PDD and ER sheet has been revised addressing aforesaid point)

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
CAR-51 The accuracy level of the measurement method is to be included, in particular for the electricity generation and biogas flow and methane content therein.	*B.7.1.11*	**Response 1:** Related info for electricity meters were already given in related table as *"The meters should comply with EPDK regulations which define the accuracy class of the meters as 0.2 or 0.5 depending on the capacity of the circuit as given in document in link (http://www.epdk.gov.tr/web/elektrik-piyasasi-dairesi/44)."* For the methane content please see the response of CAR-50 For the biogas flow from digesters and wwtp line, accuracy level info is added	Review-1 Ok Closed (The PDD has been revised)
CAR-52 In context of the biogas flow (Vf (coming from wastewater treatment plant)), please clarify the reference to WWTP in the additional comment row, wherein it is also indicated that biogas volume recovered from wwtp will be excluded from baseline emission calculations.	B.7.1.16	**Response 1:** Please see the additional comment raw of related table *"Volumetric flow meters will be used for measuring the volume from WWTP. Flow meters located at the exit of the digesters of WWTP. This data will be understood after project starts to operation phase. In fact biogas volume recovered from wwtp will be excluded from baseline emission calculations. Briefly, this value will be monitored with calibrated gas meters on site and does not included in emission reduction calculations above (excluded)"* **Response 2:** The statement below is added to monitoring plan.	Review-1 The monitoring plan is to be further clarified as to how the exclusion would be applied. Review-2 Ok Closed (The PDD has been revised)

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
		"Project has monitoring equipments "a biogas meter" on wwtp line. The biogas records of this meter and related electricity generation is to be excluded from the emission reduction calculations." After gathering the data recorded by biogas meter on wwtp linet he exclusion could be done the way explained below. The related statement added to PDD also in related table and also in Section B.7.3. *"Since the Project will monitor the total biogas amount and corresponding electricity and heat generation, the ratio of "Biogas from wwtp/total biogas" could multiply the total electricity and heat generation data to find out and exclude the electricity and heat generated belonged to biogas from wwtp line and corresponding CO2 amount."*	
CAR-53 The monitoring plan does not include all the relevant tools and the associated monitoring parameters. As per the methodology, the emission reductions achieved by the project activity from the anaerobic digester due to the collection and destruction of biogas shall be determined ex post through direct measurement of the amount of biogas fuelled, flared or gainfully used. The number of employment is stated inconsistently	B.7.1.17	**Response 1:** These are the parameters which were validated such as in similar projects of same project owner (!). Please be specific on the missing ones that you aware to effective time use of both of us. Meanwhile there are 22 employee on project site and PDD dated 15.10.2021 consisting this information. Please see the similar responses including the PDD_15.10.2021 reference above. Monitoring parameter Nlt and related tables are all corresponding	Review-1 Please clarify how the biogas flow going to the engines and flare will be monitored. Further, the operation of engines is not included. The total mass of freight transported too has not been included. Also, parameters associated for estimation of leakage emission associated with the incremental distance travelled for waste/final compost/ residue

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as 27 staff, whereas earlier the PDD presented 20. Furthermore, the contribution to SDG12 in terms of waste managed is not indicated as a monitoring parameter.		to SDG 12 since the project managed the manure (wastes) of the farms mentioned in these tables. **Response 2:** - Flare unit consists its own gas meter. Moreover, biogas goes to gas engines is recording by using the calibrated biogas meters whose QA/QC details is given in table of the parameter "Vf". Schematic representation of these meters is present in Section B2 which indicates the location of the meters. - The parameters are not related with total amount of waste in that section. They are about animal number and this info was already given. For the total amount of waste please see the other sections of PDD. This info given in many sections as it related to the project capacity (95 tonne/day) - Please see the clarifications on similar issue above. Leakage emissions are not necessarily to calculate for this project. **Response 3:** 1-2)Two parameters are added to monitoring plan on the flow rate of the residual gas to the flare and status of engine operation 3) Two new parameters are added to monitor manure transportation	transportation are to be included, if relevant. Review-2 1) The parameter for measuring gas flow to flare is also to be included. 2) The operation of engines is to be included. 3) The total amount of manure transported is to be included rather than the composite parameter for PE_transport. Review-3 Ok Closed (PDD has been revised addressing aforesaid points)
CAR-54 All the relevant monitoring parameters as per the methodology and the associate tools have not been included in the section for e.g., measurement of the biogas flow, methane content, operation of engines,	B.7.1.18	**Response 1:** - ***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*	Review-1 The monitoring plan is to be further clarified as to how the exclusion would be applied. The operation of engines is not included as a

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operation of flare etc. Further, it is unclear as to how the baseline emissions from the co-digestion of the agricultural waste would be discounted. As per the methodology, 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.		*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*" Under the baseline emission calculations agricultural wastes is not taken into account as per methodological criteria; however, project emissions due to these wastes are taken into consideration for the project such as emissions caused due transportation in revised PDD and Ver Calc. excel document. For the methane content there is an fix ante-parameter added to section B.3 Moeover, for the biogas measurements the accuracy class info and calibration procedure with related regulation info is added under parameter "Vf" **Response 2:** - Related parameter for the content of methane is added to monitoring parameters **Response 3:** Please see the response of CAR-53	monitoring parameter either. The source/reference to the methane content is to eb indicated also acknowledging the parameter 'Volumetric fraction of greenhouse gas i in a time interval t on a dry basis'. Review-2 Please refer open comments above. Review-3 Ok Closed (PDD has been revised addressing aforesaid points)
CAR-55 Please clarify the statement in section B.7.2 'No sampling plan will be necessary as in 1st CP'.	B.7.2.1	**Response 1:** Revised	Review-1 Ok Closed (The PDD has been revised)
CAR-56	B.7.3.1	**Response 1:**	Review-1 The other elements of monitoring

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Please clarify the basis of stating N/A in section B.7.3. Further, the section does not provide much detail regarding the biogas measurement and associated data management.		"N/A" is deleted **Response 2:** Ok added	plan should also provide the details for exclusion of biogas from wastewater treatment too. Review-2 Ok Closed (The PDD has been revised)
CAR-57 The responsibilities and institutional arrangements for data collection and archiving in context of biogas is to be indicated.	B.7.3.2	**Response 1:** Please see the new additions in terms of calibration of biogas meters on tables in B.7.3. Other than, there is no institutional agreements and responsibilities of project owner. However, a clarification added such that; "Data stored in excel documents (**biogas production, electricity site records, and heat generation records**) by plant manager more than 2 years."	Review-1 Ok Closed (The PDD has been revised)
CAR-58 The safeguarding principles that will be monitored have to be summarized including the mitigation measures added to the monitoring plan.	D.1.1	**Response 1:** Waste generation (waste oil, municipal solid waste and wastewater) and quality of employment were already placed in monitoring plan with related tables. There are no other issues for addition for example odor problem since the project site is in organized industrial zone.	Review-1 Ok Closed (The PDD has been revised)
CAR-59 The assessment that the project complies with GS4GG Gender Sensitive requirements has not been performed. Further, please provide evidence to	D.2.1	**Response 1:** Explanation is added to related table in section D.	Review-1 Ok Closed (The PDD has been revised)

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demonstrate that the project concept and design cover the overall societal context from a gender perspective.			
CAR-60 Please provide the summary of the LSC. Also, clarify and correct section E.1, wherein it is stated that, 'During the remote site visit under validation progress for renewal of crediting period, local stakeholders clearly stated that the solid and liquid fertilizers provided by this facility (the Project) contributed significantly to the production in their agricultural activities. Moreover, stakeholder has no negative comment on project activities. Remote site visit was held in 04 November 2021.'	E.1.1	**Response 1:** The statement "During the remote site visit under validation progress for renewal of crediting period," is deleted in revised MR. Brief summary of LSC is added to this part.	Review-1 Ok Closed (The PDD has been revised)
CAR-61 The relevant methods and all details of chosen methods for receiving continuous input/grievance mechanism have not been provided in the related tabular format.	E.2.1	**Response 1:** Detailed mechanism added to tubular format in section E	Review-1 Ok Closed (The PDD has been revised)
CL-1 Please submit the LSC meeting dated 19/01/2016, EIA report dated 23/08/2017 among other documents including the GS review documents.	A.1.4	**Response 1:** These documents provided on February 2021 already. Please check the related archive. Anyway, docs will be shared again to speed up the process.	Review-1 Ok Closed (Documents provided)
CL-2 It is indicated that no public funding is used for the project activity. Please submit the documentary evidence for the project funding.	A.5.1	**Response 1:** Sütaş A.Ş. within the scope of Enfaş A.Ş. completed the project with its own resources. if a loan or fund had been used, it could be shared, but it is not considered necessary to share a document that will prove the work done with its own resources.	Review-1 Ok Closed (Clarified)

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CL-3 It has been indicated that the management of livestock populations are to follow Turkish Law and Regulations with the section ''Regulation of Establishment, Execution and Supervision of Livestock Facilities''[5] Please provide documentary evidence that the farms are in compliance with the regulations and also submit the agreement(s) with the farms and Enfas.	B.2.5.1	**Response 1:** For the farms with in compliance with the regulations please see the site photograpy of baseline situation which is to be shared with this document. In addition, please check your e-mail dated as 15.10.2021. Farm agreements were shared in that e-mail consisting animal numbers which are the source of emission reduction calculations also. As remembered via the response of many CARs above you may miss these documents. To speed up the process docs are to be provided again.	Review-1 Ok Closed (Documents provided)
CL-4 Please provide documentary evidence to confirm that in the baseline scenario cattle manure generated at farms is stored generally in tanks in anaerobic conditions. Tanks' depths, when applicable, are more than 1 m.	B.2.5.3	**Response 1:** Please see the response of CL-3 and corresponding site photo	Review-1 Ok Closed (Documents provided)
CL-5 Please provide documentary evidence to confirm that in the baseline scenario the retention time of manure waste is greater than one month in the baseline scenario.	B.2.5.5	**Response 1:** Please check your e-mail dated as 15.10.2021. Related declaration/documentary shared in that e-mail. As remembered via the response of many CARs above you may miss these documents. To speed up the process the related doc is to be provided again.	Review-1 Ok Closed (Documents provided)
CL-6 Please provide documentary evidence to confirm that in the project case there is no leakage of manure waste into ground water, e.g. the lagoon	B.2.5.6	**Response 1:** Project site has and detail and approved EIA report (details are provided there and this report already shared) and environmental permissions gathered by the governmental authorities. In addition	Review-1 Ok Closed (Documents provided)

[5] https://www.resmigazete.gov.tr/eskiler/2006/08/20060809-4.htm

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should have a non-permeable layer at the lagoon bottom		project site is within the organized industrial zone and they are inspected by the organized zone governance regularly with all other firms. Hence there is no chance for such a environmental problems for the projects has these conditions.	
CL-7 Please provide documentary evidence to confirm that manure is not stored more than 24 hours.	B.3.11.1	**Response 1:** Site photo is shared with this document.	Review-1 Ok Closed (Documents provided)
CL-8 Please provide documentary evidence for the following: - the common practice for the farms and facilities is uncovered anaerobic lagoons/ponds; - the lagoon systems of common practice and lagoons depth; and - the retention time of the manure in the stated lagoon systems above is greater than 1 month long.	B.4.20	**Response 1:** Please see the response of CL-3 and shared site photo related with it.	Review-1 Ok Closed (Documents provided)
CL-9 The project is indicated as a regular project earlier in the PDD and retroactive subsequently. Please submit the GS preliminary review document.	B.5.1.2	**Response 1:** Please see the response of CL-1	Review-1 Ok Closed (Documents provided)
CL-10 Please submit the preliminary GS review and LSC review documents.	F.1.1	**Response 1:** Please see the response of CL-1	Review-1 Ok Closed (Documents provided)
CL-11 Please provide evidence to confirm the following: - working agreements with the individual workers.	4	**Response 1:** - Working agreements are the issue of monitoring period not validation process. Social security docs including worker list will be provided during monitoring periods.	Review-1 Ok Closed (Documents 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 Participants' Response	Validation Team Conclusion
- how the project avoids community exposure to increased health risks and does not adversely affect the health of the workers and the community. - Please provide evidence to demonstrate that the project concept and design cover the overall societal context from a gender perspective		- Project owner provided health and safety trainings to workers to avoid any accidents and these trainings are also regulative mandatory as indicated in safeguarding principles part of the PDD. - At the project site, nearly all of the local stakeholders has their own animal farms and agricultural lands and the women in the region preferred to work in their own property. Project owner had many women employees at main office in Karacabey, Bursa (head office); however, it is not possible to find out female workers on site since they have their own properties within the concept of agricultural activities to deal with already.	
FAR-1 The VVB can confirm that the SFR was conducted but the evidence is not robust enough to verify all the required details, a FAR is thus raised. The developer should re-conduct the SFR before the 1st issuance.			
FAR-2 As per the 'Design Change Requirements v1.1', noting that the project crediting start date has been changed, with reference to clause 3.3.1, Prior to or at the time of first verification, the project shall: i. Demonstrate that no changes have occurred to the project activity that would result in a less conservative baseline or update the baseline using conservative data; ii. Demonstrate that substantive progress has been made by the project developer to start the project activity.			

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Draft Report Clarifications, Forward Action and Corrective Action Requests by Validation Team	Ref. to Checklist Questions in Table-1	Summary of Project Participants' Response	Validation Team Conclusion
Noting that the project is already operational and the crediting period start date is retroactive, the current guidance whether such change is allowed is unclear.			

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