

**GOLD STANDARD FOR THE GLOBAL GOALS (GS4GG)
REPORT
-
VERIFICATION**



Project Title:	250 MW Solar PV Plant by Mahindra Renewables in Rajasthan
Monitoring Period:	14/05/2021 to 31/12/2022 (Both days included)
GS project ID:	GS 7664 ¹
Internal ID:	A+SH_SYST_TQC_GS_VER_3723
Customer:	EKI Energy Services Limited
Date:	30/05/2024
Revision:	04

¹ [GSF Registry \(goldstandard.org\)](https://goldstandard.org)

SUMMARY			
Reference No.	Date (first version)	Version No.	Date (last version)
A+SH_SYST_TQC_GS_VER_3723	25/10/2023	04	30/05/2024
GS4GG Verification			
GS4GG Certified Product (sought):		GS VER	
GS4GG SDG Impact Statement (sought):		Impact Certification	
General Information			
Client	EKI Energy Services Limited		
Project Title	250 MW Solar PV Plant by Mahindra Renewables in Rajasthan		
Project Participants	Mahindra Renewables Private Limited		
Project Location	Bhiv Ji ka Gaon, Bap, Jodhpur, Rajasthan India		
Contact Person	Mr. Saurabh Mehta		
Monitoring Period:	14/05/2021 to 31/12/2022 (Both days included)		
GS4GG Version: GS4GG Principles and Requirements 1.2 GS4GG Activity Requirements: RE Activity Requirements, version 1.4 Applied Methodology Version: ACM0002 "Grid-connected electricity generation from renewable sources" Version 20.0 ^{04/2}		GS4GG Sectoral Scope: 2 UNFCCC CDM Sectoral Scope: 1 Technical Area: 1.2	
Monitoring Report Version: 01 ^{01/} Date: 09/06/2023		Final Monitoring Report Version: 04 ^{01/} Date: 01/11/2023	
Certified Project Design Document Version: Assessment team checked the registered GS PDD version 08 dated 21/11/2022. ^{03/} Date: Provided above Final Passport: NA			
Estimated values for the Monitoring period for all SDG:			
SDG NO.	SDG	Estimated Values for the current monitoring period	
7	Renewable Electricity Generated	870,229.20 MWh electricity generation	
8	Trainings provided to O&M staff	02 Trainings (01 Training /Annual)	
8	Number of Jobs generated	15 jobs created	
13	Emission Reduction	809,757.96 tCO ₂ e	

² <https://cdm.unfccc.int/UserManagement/FileStorage/AG07ZJQ3EXD42LT5YV9HR16M8KINPO>

SUMMARY

As per PDD, 565,587 MWh is estimated annually. Phase wise estimated generation are as follows

From (Commissioning date)	To	No of days	Capacity (MW)	Estimated Generation as per Registered GS PDD
14/05/2021	31/12/2022	597	100	370033.36
08/06/2021	31/12/2022	572	60	212722.69
24/07/2021	31/12/2022	526	50	163013.02
17/08/2021	31/12/2022	502	40	124460.13
Total (MWh)				870,229.20

From (Commissioning date)	To	No of days	Capacity (MW)	Estimated Emission Reduction as per Registered GS PDD	Estimated Generation as per Registered GS PDD
14/05/2021	31/12/2022	597	100	344,320.16	370,033.36
08/06/2021	31/12/2022	572	60	197,940.84	212,722.69
24/07/2021	31/12/2022	526	50	151,685.43	163,013.02
17/08/2021	31/12/2022	502	40	115,811.54	124,460.13
Total Estimated				809,757.96 tCO₂e	870,229.20 tCO₂e

Actual values for the Monitoring period for all SDG:

SDG	SDG	Actual values for this monitoring period
7	Renewable Electricity Generated	932,083.61 MWh electricity generation
8	Trainings provided to O&M staff	66 Training provided to O&M Staff
8	Number of Jobs generated	37 jobs created
8	Income (INR)	The income to all the unskilled workers are made on day-to-day basis in line with minimum wage requirements.
13	Emission Reduction	867,303 tCO ₂ e emission reduction

Selected Sustainable Development Goals (SDGs): 7; 8; 13

Verification Summary

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by EKI Energy Services Limited to perform the 1st periodical verification of "250 MW Solar PV Plant by Mahindra Renewables in Rajasthan" (Ref. No. GS7664³) applying the methodology ACM0002 Version 20.0⁴.

³ [GSF Registry \(goldstandard.org\)](https://goldstandard.org/)

⁴ <https://cdm.unfccc.int/UserManagement/FileStorage/AG07ZJQ3EXD42LT5YV9HR16M8KINPO>

SUMMARY

The management of EKI Energy Services Limited is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions.

A desk review and an interviews have been conducted to verify the data submitted in the monitoring report. Applus+ Certification confirms the following have been reviewed:

- The registered PDD including the monitoring plan;
- Monitoring report(s);
- The applied monitoring methodology;
- Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board;
- GS4GG guideline and related Annex.
- All information and references relevant to the project activity's resulting in emission reductions.

Mahindra Renewables Private Limited has installed solar power project at Jodhpur district, Rajasthan, India, with capacity of 250 MW which is commissioned between 14/05/2021 to 17/08/2021 in phased manner. The purpose of the project activity is to generate electrical power through operation of Solar photovoltaic power plant. The project activity installation comprises of Monocrystalline and poly crystalline solar PV modules.

Electricity generated from the project activity is sent to Indian grid of India. As per GS4GG PDD, the project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 809,757.96 tCO₂e for the current monitoring period, thereon displacing 870,229.20 MWh/year amount of electricity from the generation-mix of power plants connected to the Indian electricity grid, which is mainly dominated by thermal/ fossil fuel-based power plant.

The details of the project are mentioned in the table: -

Project Investors' Name	Commissioning Date	Capacity in MW	Village/District	State
Mahindra Renewables Private Limited	14/05/2021	100 MW	Bhiv Ji ka Gaon, Bap, Jodhpur	Rajasthan
	08/06/2021	60 MW		
	24/07/2021	50 MW		
	17/08/2021	40 MW		

The monitoring of emission reduction and sustainable development indicators has been carried out in accordance to respective registered PDD.

Applus+ Certification confirms that the project is implemented in accordance with the validated and registered PDD^{03/}. The monitoring plan complies with the applied methodology ACM0002 Version 20.0^{04/} and the GS4GG guideline the monitoring has been carried out in accordance with the monitoring plan. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the projects GHG emissions and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information reviewed and evaluated Applus+ Certification confirms that the implementation of the project has resulted in 867,303 tCO₂e emission reductions during period 14/05/2021 to 31/12/2022 (Both days included).

During verification, Total 01 CL and 05 CARs were raised and closed successfully. Further 01 FAR is raised for future VVB.

ASSESSMENT TEAM		
Team Members	Type of Resource ⁵	Organization (for OEs)
Lead Auditor: Dr. Atul Takarkhede	☐ IR ☐ EI ☒ OE	M/s True Quality Certifications Private Limited
Auditor: Mr. Ishan Shrivastava	☐ IR ☐ EI ☒ OE	M/s True Quality Certifications Private Limited
Technical Reviewer: Mr. Denny Xue	☐ IR ☒ EI ☐ OE	Applus+ Certification

Note: In line with the GS Rule Update RU 2020 PR – PR V1.2 dated on 02/04/2020, the VVB hereby discloses that the VVB has performed Validation of this project with different team members than in this verification.

⁵ IR (Internal Resource); EI (External Individual); OE (Outsourced Entity)

ABBREVIATIONS	
ACM	Approved Consolidated Methodology
AM	Approved Methodology
AMS	Approved Methodology Small Scale
Applus+ LGAI / Applus+	LGAI Technological Center, S.A. (Applus+ Certification)
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CDM VVS version 03	CDM validation and verification standard for project activities, Version 03.0
CER	Certified Emission Reduction
CL / CR	Clarification Request
CM	Combined Margin
CMP	Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol
DNA	Designated National Authority
DOE	Designated Operational Entity
EF	Emission Factor
EIA	Environmental Impact Assessment
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
GS4GG (or GS)	Gold Standard for Global Goals
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
MPRL	Mahindra Renewables Private Limited
MP	Monitoring Plan
MR	Monitoring Report
NGO	Non-Governmental Organization
SDG	Sustainable Development Goal
TAC	Gold Standard Technical Advisory Committee
OM	Operational Margin
PDD	Project Design Document
PP	Project Participant
SECI	Solar Energy Corporation of India Limited
UNFCCC	United Nations Framework Convention for Climate Change
VVB	Validation and Verification Body
VVS	Validation and Verification Standard

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1. INTRODUCTION

1.1 Objective

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by EKI Energy Services Limited to perform the 1st periodical verification of "250 MW Solar PV Plant by Mahindra Renewables in Rajasthan" applying the methodology ACM0002 Version 20.0 and GS4GG guideline. Gold Standard projects must undergo periodic audits and verification of emission reductions as the basis for issuance of Gold Standard VERs.

The objective of the verification work is to assess the compliance with the requirements of paragraph 62 of the CDM Modalities and Procedures as well as the GS4GG guidelines and relevant Principles and Requirements. According to this assessment Applus+ Certification shall:

- Ensure that the project activity has been implemented and operated as per the registered PDD and that all physical features (technology, project equipment, monitoring and metering equipment) of the project are in place;
- Ensure that the published MR and other supporting documents provided are complete, verifiable and in accordance with applicable CDM validation and verification standard for project activities, Version 03.0^{/05/} for the project activities and Gold Standard Validation and Verification Standard version 01.0⁶ (i.e., applicable GS4GG requirements);
- Ensure that the actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology;
- Evaluate the data recorded and stored as per the ACM0002 Version 20.0^{/04/}.

1.2 Scope

The verification scope encompasses an independent and objective review and ex-post determination of the monitored reductions in GHG emissions by the DOE. The verification is based on the submitted monitoring report, registered PDD and registered Passport as well as its validation report, the applied monitoring methodology, relevant decisions, clarifications and guidance from the CMP and the EB, GS4GG guideline and any other information and references relevant to the project activity's resulting emission reductions. These documents are reviewed against the requirements of the Kyoto Protocol, the CDM Modalities and Procedures, GS4GG guideline and relevant Principles and Requirements, as well as their related rules and guidance.

Based on the requirements in the CDM validation and verification standard for project activities, Version 03.0 and GS validation and verification standard for project activities, Version 01.0^{/05/} for the project activities as well as the GS4GG guidelines, Applus+ Certification has applied a rule-based approach for the verification of the project. The principles of accuracy, completeness, relevance, reliability and credibility were combined with a conservative approach to establish a traceable and transparent verification opinion.

The verification considers both quantitative and qualitative information on emission reductions. The verification also considers the monitoring of SDG goals as per the requirement of GS4GG guideline.

⁶ <https://globalgoals.goldstandard.org/113-par-validation-and-verification-standard/>

The verification is not meant to provide any consultancy towards the client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the monitoring activities.

1.3 Description of the project activity

Mahindra Renewables Private Limited has implemented a Greenfield “250 MW Solar PV Plant by Mahindra Renewables in Rajasthan” (Project activity) in Jodhpur district, Rajasthan, India. Project activity comprises of state-of-the-art, environment friendly, solar PV technology. Project activity comes under the purview of large-scale, solar power technology-based project implemented in India. Electricity generated from the project activity is sent to Indian grid. As per validated PDD, the gross electricity generation from the project activity is estimated as 870,229.20 MWh resulting in estimated emission reductions of 809,757.96 tCO_{2e} for the current monitoring period. The project has obtained requisite clearances and has already commissioned and was confirmed during onsite visit & document review.

Project activity is a grid-connected large-scale 250 MW solar photo voltaic power generation facility. The monitoring of emission reduction and sustainable development indicators has been carried out in accordance to respective registered PDD.

2. METHODOLOGY

Applus+ Certification approach to the verification is a two-stage process. In the 1st stage, Applus+ Certification completed a strategic review and risk assessment of the projects activities and processes in order to gain a full understanding of:

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant;
- Protocols used to estimate or measure GHG emissions from these sources;
- Collection and handling of data;
- Controls on the collection and handling of data;
- Means of verifying reported data; and
- Compilation of the monitoring report.

Applus+ Certification used a periodical Verification Checklist which, based on the risk-based assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan.

In the 2nd stage, using the Verification Checklist, Applus+ Certification verified the implementation of the monitoring plan and the data presented in the Monitoring Report for the period in question. This involved an Onsite audit and a desk review of the Monitoring Report. This Verification Report describes the findings of this assessment.

2.1 Appointment of the assessment team

According to the sectoral scope / technical area and experience in the sectoral or national business environment, LGAI Technological Center, S.A. (Applus+ Certification) has composed a project

assessment team in accordance with the appointment rules in the internal Quality Management System of LGAI Technological Center, S.A. (Applus+ Certification).

The composition of audit team shall be approved by the LGAI Technological Center, S.A. (Applus+ Certification) ensuring that the required skills are covered by the team.

The four qualification levels for team members that are assigned by formal appointment rules are as presented below:

- Lead Auditor (LA).
- Auditor (A) / Auditor in Training (AiT).
- Technical Expert (TE).
- Technical Reviewer (TR).

The sectoral scope / technical area knowledge linked to the applied methodology/ies shall be covered by the assessment team.

Name	Role	SS Coverage	TA Coverage	Financial aspect	Host country experience
Dr. Atul Takarkhede	LA/TE	YES	YES	NA	YES
Mr. Ishan Shrivastava	A	YES	YES	NA	YES
Mr. Denny Xue	TR	YES	YES	NA	NA

The complete list of CVs is included as Appendix 3 of this report.

2.2 Document review

The Monitoring Report version 01^{/01/} was submitted to DOE before the verification activities started. The MR was assessed based on all the relevant documents. The aim of the assessment in the desk review was to:

- Verify the completeness of the data and the information presented in the MR;
- Check the compliance of the MR with respect to the monitoring plan depicted in the registered PDD, verify that the applied methodology was carried out. Particular attention to the frequency of measurements, the quality of the metering equipment including calibration requirements, and the quality assurance and quality control procedures of the power plant was checked by the assessment team.
- Evaluate the data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.
- Please check reference 4 of this report for detail of the documents checked.

2.3 On site assessment and follow up interviews

As a part of the verification, the on-site inspection has been performed by the assessment team.

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1	Sen	Jitendra	PP representative	24/07/2023	Project implementation, Baseline emissions, ER calculations, Sustainable monitoring etc.	Dr. Atul Takarkhede (Lead Auditor) And Ishan Shrivastava (Auditor)
2	Kumar	Prabhat	HSE Engineer	24/07/2023	Stakeholder meeting- Employment opportunities, Standard of Livings etc.	
3	Raj	Khem	Site Incharge	24/07/2023	Stakeholder meeting- Employment opportunities, Standard of Livings etc.	
4	Jat	Rohan	Chief Manager	24/07/2023	Stakeholder meeting- Employment opportunities, Standard of Livings etc.	
5	Vyas	Sandeep	Sr. Engineer	24/07/2023	Stakeholder meeting- Employment opportunities, Standard of Livings etc.	
6	Singh	Karan	Jr. Engineer	24/07/2023	Stakeholder meeting- Employment opportunities, Standard of Livings etc.	
7	Singh	Vivek	Local stakeholder	24/07/2023	Stakeholder meeting- Employment opportunities, Standard of Livings etc.	

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
8	Singh	Ratan	Local stakeholder	24/07/2023	Stakeholder meeting- Employment opportunities, Standard of Livings etc.	
9	Singh	Dhelu	Local stakeholder	24/07/2023	Stakeholder meeting- Employment opportunities, Standard of Livings etc.	
10	Singh	Girdhar	Local stakeholder	24/07/2023	Stakeholder meeting- Employment opportunities, Standard of Livings etc.	

The objective of the on-site assessment is to:

- Confirm the implementation and operation of the project;
- Review the data flow for generating, aggregating and reporting the monitoring parameters;
- Confirm the correct implementation of procedures for operations and data collection;
- Cross-check the information provided in the MR documentation with other sources;
- Check the monitoring equipment against the requirements of the PDD, GS PDD and the approved methodology, including calibrations, maintenance, etc.;
- Review the calculations and assumptions used to obtain the GHG data and ER;
- Identify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters.
- Confirm the SDG goals/ Sustainable monitoring parameter as per the registered GS PDD^{/03/}
- To understand grievance (if any) from the villagers during the monitoring period.
- Local stakeholder meeting details:

Name of the stakeholder	Krishna Navle
Occupation	Villager

DOE QUESTION: Did PP provided employment opportunity to locals?

Answer: Yes, employment is generated and the locals are given priority. Assessment team noted that locals were employed for the project activity for the current monitoring period.

DOE also like to conclude that during the site visit it was observed that local people were employed for security and operation related work like vegetation improvement and other unskilled work. DOE also found that skilled local persons were also employed by the organization for the operation and maintenance of the power plant.

Name of the stakeholder	Chandramohan patel
Occupation	Local stakeholder (villager)
DOE questions: Did the power plant have any harmful impact on farming or vegetations?	
Answer: NO. The plant is implemented in barren land and there were no any fertile land or crop which is damaged.	

2.4 Quality of evidences

Sufficient evidence covering the full verification period in the required frequency is available to verify the figures stated in the final MR Version 04⁰¹. Specific cross-checks have been done in cases that further sources were available. The monitoring report's figures were checked by the assessment team against the raw data. The data collection system meets the requirements of the monitoring plan as per the methodology.

2.5 Reporting of findings

As an outcome of the verification process, the assessment team can raise different types of findings.

Where a non-conformance arises the assessment team shall raise a Corrective Action Request (CAR). A CAR is issued, where:

- Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;
- Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;
- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
- Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.

The assessment team shall raise a Clarification Request (CR) if information is insufficient or not clear enough to determine whether the applicable CDM/GS requirements have been met.

All CARs /CRs/ FARs raised during verification shall be resolved prior to submitting a request for issuance.

Forward Action Requests (FARs) may be raised during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period.

Please refer Appendix 1 of this report. Total numbers of CARs: 05, CLs: 01, FARs: 01 (Raised during current verification).

2.6 Internal Quality Control

As a final step of verification, the final documentation including the verification report has to undergo an internal quality control by the Technical Reviewer. Each report has to be finally approved either by the DOE's Technical Manager or the Deputy. This approval process also includes another quality assurance check in terms of Administrative Review. In case one of these two persons is part of the assessment team, the final approval can only be given by the person who is not a part of the assessment team. If the documents have been satisfactorily approved, the Request for Issuance is submitted to the GS Registry along with the relevant documents.

3. VERIFICATION FINDINGS

3.1 FARs from Validation / Previous Verification

This is 1st periodic verification for the project activity and one FAR was raised during Design review, which is considered as CAR#01 in current verification and Details of the same is given under Appendix I of this report. FAR 01 is raised during current (1st) verification of the project activity and details of the same is given under Appendix I of this report.

3.2 Project Implementation in accordance with the registered Project Design Document

The project activity was fully implemented according to the description presented in the registered PDD. The assessment team confirms, through the onsite audit that all physical features of the project activity including data collecting systems and storage have been implemented in accordance with the registered PDD for GS4GG and Passport.

The technical features of the equipment's have been verified by the assessment team by reviewing following documentation:

- Interviews of onsite personnels during onsite visit
- Technical detail analysis of the power plant from the documents submitted by the manufacturer.
- Commissioning certificates of the plant
- PPA for the project activity
- Mahindra Renewables Private Limited has installed solar power project at Jodhpur district, Rajasthan, India with capacity of 250 MW. Technical details^{/19/} are as follows:

Item	Description
Plant Capacity	250 MW _{AC} / 362 MW _{DC}

Solar PV Module		
Make	Jinko	Canadian Solar
Type	Cheetah HC 72M 390-410 Watt	Ku Max HIGH EFFICIENCY POLY MODULE CS3U-355I360I365I370P
Cell Type	Monocrystalline	Polycrystalline
Dimensions	2008x1002x30 mm (79.06x39.45x1.18 inch)	2000 x 992 x 35 mm (78.7 x 39.1 x 1.38 in)
Weight	22.0 kg (48.5 lbs)	22.5 kg (49.6 lbs)
Frame	Anodized Aluminium Alloy	Anodized aluminium alloy, crossbar enhanced
Solar Inverter	Central	
Power Transformer	a) HV Rating: 220 kV b) MV Rating 33 kV c) Capacity of Transformer: 100 MVA (As per design requirement)	
UPS and Battery	At Inverter Station area: Capacity: 2 kVA (Capacity as per Design) At Main Control Room Capacity: 7.5 kVA (Capacity as per Design)	
Weather Monitoring System	Pyrometer, Anemometer, Anemoscope, temp sensor & Data logger	
Electrical Characteristics		
3-phase alternating current - Nominal frequency is 50 Hz - Final Voltage at Delivery Point is 400/220/132/66kV		

The details of the project are mentioned in the table:

Project Investors' Name	Commissioning Date	Capacity	Village/Taluka	District	Latitude	Longitude
Mahindra Renewables Private Limited	100 MW	14/05/2021	Bhiv Ji ka Gaon, Bap	Jodhpur	27°22'48.24" N	72°12'9.33"E
	60 MW	08/06/2021				
	50 MW	24/07/2021				
	40 MW	17/08/2021				

Assessment team checked the commissioning date of the project activity from the Commissioning certificate^{/10/} issued by the government authority i.e., Solar Energy Corporation of India Ltd. and found the same to be appropriate.

The project activity was in normal operational during the monitoring period and the same has been confirmed during interviews with PP and crosschecked from review of REA statement & breakdown records submitted by PP. Power plant was working throughout the monitoring period and same have been conformed from REA values. No unusual activates observed during the

monitoring period and plant was undergone scheduled as well as emergency maintenance as per the recommendation of the manufacturers. No Major breakdown observed and the same is confirmed by the assessment team with the plant log details and REAs.

The verification team has reviewed the commissioning certificates & PPA to conclude that the capacity of the project is same as mentioned in the registered GS PDD and explained by PP during interviews. The capacity of the project activity does not change after the registration of the project activity and same have been confirmed from the commission certificate, PPA and JMRs issued by State Utility and Invoices raised by the PP towards SECI.

Also from review of other documents such as Commissioning certificate^{/10/}, PPA^{/16/} & REA^{/08/}, it was observed that the rated capacity of the project is 250 MW. The capacity of the project is more than 15 MW and thus the same qualifies as large-scale project activity.

Plant is located in Jodhpur district, Rajasthan, India, India. Assessment team also checked the locations of the project activity in the registered PDD^{/03/}, validation report and onsite visit through GPS. Thus, location provided in MR are found in line with registered documents of the project activity.

The project is connected to Indian grid (as per the grid structure of India) and the same is found correct by the assessment team during the review of commissioning certificate, PPA and interviews with PP. The grid structure as mentioned in the PDD is still applicable for the project and ex-ante emission factor as proposed in the PDD is used for emission reduction calculation. Assessment team noted that the project activity has entered a power purchase agreement with the SECI. The electricity is fed in the Integrated Indian grid.

The commissioning details as provided in the MR were checked with the commissioning certificates^{/10/} issued by SECI. The commission certificate is issued by "Government agencies" which is a third-party government firm and thus the commissioning dates are acceptable to the assessment team.

Moreover, there were no changes in host country regulations which may impact either baseline or additionality of the project. Thus, assessment team confirms that the project is implemented as per the registered PDD and no change in additionality/baseline is envisaged for the present monitoring period.

The amount of GS-VERs achieved during the present monitoring period are 7.11% higher than the estimated value in the PDD. This is due to the and climate condition which is not in control of the PP. Thus, acceptable to VVB team.

Assessment team also checked that the projects are not registered under the REC mechanism of India and the same can be cross-checked at <https://recregistryindia.nic.in>. Also, International REC (I-REC) registry (<https://evident.services/device-register>) is cross-checked and found that this project is not under I-REC as well. Thus, double counting for the current monitoring period is ruled out.

Assessment team also checked the other registry like UNFCCC and VCS; it has been observed found that Project is not registered in any other registry.

Compliance of the Monitoring Plan with the Monitoring Methodology:

The verification team is able to confirm that the monitoring plan is in accordance with the approved methodology ACM0002 Version 20.0^{/04/}, applied by the GS project activity.

No deviation, correction or permanent change to the monitoring plan has been requested or observed. Further, VVB team found PP met the requirements as per GHG emissions reduction & sequestration product requirement version 2.1. Thus acceptable to VVB team.

Assessment team also checked the metering details of the connected solar plant and found the same to be appropriate. Feeder details were confirmed from the interviews with PP, and REAs submitted for current monitoring period. The monitoring meters are installed at state utility substation. PD has submitted SDG impact tool it is consistent with value in FVR and MR assessment team found it correct.

Materiality adopted in Verification:

Consideration of materiality in planning the verification

No.	Risk that would lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk levels	Justification	
1	Human errors: Readings from Meters (if not automatic)	LOW	Human error is likely to occur if the monitoring personnel are not trained well or inexperienced in data recording procedures and monitoring processes.	All the personal are well trained to monitor and collect data and thus risk associated with Human error is minimized. Assessment team checked the training records to confirm that all the personal are well trained to handle the activities related to monitoring. Assessment team checked the training records for the complete monitoring period and confirm that the personal are well trained to monitor and collect data for the project activity.
2	Human error: Quantification of emission reduction	LOW	Use of spread sheets without adequate data control, changes/updates, version tracking, traceability and security	All the energy statement i.e. REA ^{08/} sheets and the invoices ^{08/} for the complete monitoring period are checked and thus the assessment team confirms that the ER value is conservative and correct.

Consideration of materiality in conducting the verification

In line with Guidelines for V1.0_PAR_Validation-and-Verification-Standard, the verification team has conducted a complete verification of all the information presented in the monitoring report

and data monitored as presented in the emission reduction calculation spread sheet. It invoices follows the paper trail back to the raw data such as meter reading records and invoices. There are no material errors, overestimation of ER, omission or misstatement.

Emission Reductions (tCO₂e)/year	500,000 or more	300,000 to 500,000	300,000 or less	Micro Scale projects
Materiality Threshold para (9.6.3) of Validation-and-Verification-Standard version 1.0	0.5%	1.0%	2.0%	10.0%

The applicable materiality threshold is 0.5% for project activity as estimated ERs were more than 500,000 tCO₂e/year as per requirement of V1.0_PAR_Validation-and-Verification-Standard ^{/5/}.

Particulars / Monitoring Report	MR Version (Initial)	MR Version (Revised/Final)
Emission Reductions Achieved (tCO ₂ e) in this monitoring period	8,90,183 tCO ₂ e	8,67,303 tCO ₂ e
Applicable Threshold (%) as per para 9.6.3 of Validation-and-Verification-Standard version 1.0 ^{/5/}	2.5%	2.5%

The verification team has identified the impact of error observed due to wrong mention of values in initial ER sheet and those were corrected by PP during verification for all monitoring parameters at the individual level. There is difference in initial generation and final revised value in revised ER sheet.

3.3 Compliance of the Monitoring Plan with the Monitoring Methodology

The verification team is able to confirm that the monitoring plan is in accordance with the approved methodology ACM0002 Version 20.0, applied by the GS project activity.

No deviation, correction or permanent change to the monitoring plan has been requested or observed.

3.4 Completeness of Monitoring

The monitoring has been carried out in accordance with the monitoring plan contained in the GS PDD. All parameters were monitored and determined as per the monitoring plan of the GS PDD as follows:

a. Data and parameters fixed ex ante or at renewable of crediting period

EF_{OM,y}, **EF_{BM,y}** & **EF_{OM,y}** were mentioned as ex-ante fixed parameter.

The value for $EF_{OM,y}$, $EF_{BM,y}$ & $EF_{CM,y}$ was considered from the CO₂ baseline database published by Central Electricity Authority (CEA) version 17.0⁷. The default value as mentioned in the registered PDD and MR are same. The value of combined margin in India is being given by CEA (Central Electricity Authority, Govt. of India) and thus assessment team concludes that the value is correct and appropriate. The default value in turn is used for baseline calculation as per the formula given in the registered PDD for the current monitoring period. Assessment team checked the values, source of data, choice of data, purpose of the data mentioned in the MR from the registered PDD and confirms that the similar approach was considered for the current monitoring period also.

The relevant Emission factor values used for emission reduction calculation is as below. Also, as GS4GG “Principles and Requirements” Version 1.2 the ex-ante fixed parameters are now connected to relevant SDG indicator which is acceptable to the assessment team.

$EF_{OM,y}$ = Relevant SDG Indicator= **SDG13: Climate Action**= 0.9522 tCO₂e/MWh
 $EF_{BM,y}$ = Relevant SDG Indicator= **SDG13: Climate Action**= 0.8653 tCO₂e/MWh
 $EF_{CM,y}$ = Relevant SDG Indicator= **SDG13: Climate Action**= 0.9305 tCO₂e/MWh

b. Data and parameters monitored

As per the registered monitoring plan and requirement of the registered methodology following parameters needs to be monitored:

Relevant SDG indicators = 7 Affordable and Clean Energy

1. $EG_{PJ,grid,y}$ = Quantity of net electricity supplied to the grid (MWh)

The parameter $EG_{PJ,grid,y}$ is calculated based on the difference between values of “export” and “import” on the energy meter at the sub-station (evacuation point). The Meter Reading Statement (REA sheets) issued by State board which provide the values of export and import for the month. The same is thus used for emission reduction calculation. The project activity includes metering at the pooling substations managed by SECI & PP/O&M Contractor. The electricity exported & imported are measured by Energy meters (main meter) installed at each line in substation. The reading is recorded and the difference from last month reading gives the number of units imported/exported. The installed meters are of 0.2s accuracy class. The export and import reading is continuous and recording frequency is monthly. The QA/QC procedure is as per the requirement of the registered PDD and onsite practice. Assessment team confirms the same during the onsite interviews with PP. Assessment team checked all the values of calculated Net electricity supplied to the grid from the Meter reading statement (provides the value of export and import) issued by State electricity board. Moreover, as per the requirement of the approved methodology and registered PDD, assessment team cross checked the net electricity value as presented in the REA with the invoice^{/08/} raised and found the values match with each other. The same is thus acceptable to the assessment team and thus emission reduction calculation is correct.

Relevant SDG indicators = 13: Climate Action

2. CO₂ Emissions Reduction = Reduction in CO₂ emission reduction due to implementation of project activity

The parameter is calculated from CEA database Version 16, December 2021, published by the Central Electricity Authority, Ministry of Power, Government of India and Energy Generation.

⁷ https://cea.nic.in/wp-content/uploads/tpe_cc/2022/02/User_Guide_ver_17_2021.pdf

The same demonstrated in Emission reduction sheet and the achieved value of the emission reduction for the current monitoring period is 867,303 tCO₂. The same is acceptable to the assessment team and the emission reduction calculation is correct.

Relevant SDG indicators 8: Decent Work and Economic Growth

3. Quantitative employment and Income generation:

Number of project employees with Number of male/female, permanent/temporary, age and person with disabilities. Salary given to the employees of the project.

The parameter is taken as Quantitative employment. Same is found as total 37 Employees are working during the current monitoring period out of which 37 persons hired in 2021(6 unskilled+31 skilled) and 37 persons hired in 2022 (10 unskilled and 27 skilled).

37 Employees were Males and there are no females due to site is located in the rural area so female workers are not available to work. The PP paying equal amount of money for equal work. The same is thus acceptable to the assessment team and verified using Attendance register and Salary Slips submitted.

Quality of Employment: Training of Staff

The parameter is taken as the total number of trainings conducted during the current monitoring period for the employees. Same is found as 66 trainings -HSE Training and Soft Skill Trainings & O and M Training. The same is thus acceptable to the assessment team and verified using Training Attendance sheets and Employee records submitted.

c. Implementation of sampling plan

PP did not apply sampling plan to determine data and parameters monitored during this monitoring period. The verification team has checked all the documents such as REA issued by State electricity board /Invoices etc. and hence sampling plan was not required. The verification team hereby confirms that has checked all the documents.

d. Compliance with the calibration frequency requirements for measuring instruments

The calibration details such as make, accuracy class serial number is as per the meter available onsite and checked during verification site visit. The Calibration details^{/09/} are presented in Appendix 2 of this report. Calibration of meters carried out by a Secure Meters limited for testing and calibration, Govt of India to carry out calibration.

Assessment team checked the same and found that the calibration is appropriate and correct as traceability is ensured. The meters were calibrated as per the norms of NABL and the meters are within the permissible error limit.

3.5 SDG Outcomes Monitoring

In the Registered PDD indicators are chosen for the monitoring of sustainable monitoring:

Meth/tool	Relevant indicator	SDG	GS PDD	MR	Compliance
Quantity of net electricity supplied to the grid	SDG 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix		Quantity of net electricity supplied to the grid (MWh)	Quantity of net electricity supplied to the grid (MWh)	Yes
- Quantitative employment, - Quality of employment - Income generation	8.5.1: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value		- Number of Trainings provided to employees & O&M staff - Number of project employees with Number of male/female, permanent/temporary, age. - Salary given to the employees of the project.	- Number of Trainings provided to employees & O&M staff - Number of project employees with Number of male/female, permanent/temporary, age and person with disabilities. - Salary given to the employees of the project.	Yes
Take urgent action to combat climate change and its impacts	SDG 13: Take urgent action to combat climate change and its impacts		Reduction in CO2 emission reduction due to implementation of project activity	Reduction in CO2 emission reduction due to implementation of project activity	Yes

The verification of the parameters required by the monitoring plan is provided as follows:

Relevant SDG Indicator	SDG 7.2.1: Affordable and Clean Energy	
Data/parameter:	EG _{PJ,grid,y}	
Unit	MWh	
Description	Quantity of net electricity supplied to the grid	
Source of data checked by the assessment team	Monthly REA provided by State Utility	
Value(s) of monitored parameter	932,083.61 MWh	
	Year	SDG 7 (MWh)
	2021	309,164.06
	2022	622,919.55
	Total	932,083.61

Means of verification:	The parameter $EG_{PJ,grid,y}$ is calculated based on the difference between values of “export” and “import” on the energy meter at the pooling substation (evacuation point). The Meter Reading Statement (REA sheets) ^{/08/} issued by State board which provide the values of export and import for the month. The same is thus used for emission reduction calculation. The project activity includes metering at the substations managed by SECI & PP/O&M Contractor. The electricity exported & imported are measured by Energy meters (main meter) installed at each line in substation. The reading is recorded and the difference from last month reading gives the number of units imported/exported. The installed meters are of 0.2s accuracy class. The export and import reading is continuous and recording frequency is monthly. The QA/QC procedure is as per the requirement of the registered PDD and onsite practice. Assessment team confirms the same during the onsite interviews with PP. Assessment team checked all the values of calculated Net electricity supplied to the grid from the Meter reading statement (provides the value of export and import) issued by State electricity board. Moreover, as per the requirement of the approved methodology and registered PDD, assessment team cross checked the net electricity value as presented in the REA with the invoice raised and found the values match with each other. The same is thus acceptable to the assessment team and thus emission reduction calculation are correct. The details of the Meters are provided in appendix 2 of the report.
Cross check mechanism	The REA is cross-checked with the invoice copies. Emission reduction calculated in thus correct and accurate. The cross-check mechanism is presented in the emission reduction calculation sheet ^{/02/} and the same is found correct.

Relevant SDG Indicator	SDG 13.2.1: Climate Action	
Data/parameter:	CO ₂ Emissions Reduction	
Unit	tCO ₂	
Description	Reduction in CO2 emission reduction due to implementation of project activity	
Source of data checked by the assessment team	Emission reduction sheet ^{02/}	
Value(s) of monitored parameter	867,303 ⁸	
	Year	SDG 13 (tCO2e)
	2021	287,677
	2022	579,626
	Total	867,303

⁸ Note- The actual/ scheduled generation monitoring will be done through Northern Regional Power Committee/Northern Regional Load Despatch Centre portal (NRLDC).

In Inter State Transmission System (Central Transmission Utility) connected project(s), the energy invoicing is done on the scheduled energy for the month and the settlement of the balance amount is as per the actual energy injected against scheduled energy.

Deviation Settlement is payable or receivable on weekly basis depending on deviations in actual and schedule energy and DSM penalty.

Online daily meter readings are recorded at Grid Sub Station (Power grid Corporation of India Limited Substation). Also, Northern Regional Load Despatch Centre portal ask Project proponent team to provide their end meter readings and Power grid Corporation of India Limited end meter reading on weekly base in the form of Meter Reading Instrument (MRI) data.

Both Power grid Corporation of India Limited & Project Proponent end meter readings are cross checked to avoid any error in actual readings. Since actual energy is measured through meters, therefore same is considered for Emission Reduction calculations and scheduled energy quantity is considered for cross checking purpose with invoice.

Means of verification:	Assessment team checked that the parameter is calculated. The electricity exported & imported measured by Energy meter installed at substation. The REA is cross-checked with the invoice copies. Emission reduction calculated in thus correct and accurate.
Cross check mechanism	All the formulas are applied in line with the registered GS4GG PDD

Relevant SDG Indicator	SDG 8.5.1: Decent Work and Economic Growth	
Data/parameter:	Quality of employment	
Unit	Number of Trainings provided to employees	
Description	Number of Trainings provided to employees & O&M staff	
Source of data checked by the assessment team	Training Records ^{07/} , HSE & HR records ^{15/}	
	Year	Number of trainings
	2021	4 trainings
	2022	62 trainings
	Total	66 trainings
Value(s) of monitored parameter	Assessment team checked Number of Trainings provided to employees & O&M staffs. A total of 66 training programmes to its employees and O&M staffs. The training records for the monitoring period is checked by the assessment team and found correct.	
Means of verification:	The value for this parameter is taken from Plant records. Verification team interviewed some employees & local stakeholders.	
Cross check mechanism	Not applicable	

Relevant SDG Indicator	SDG 8.5.1: Decent Work and Economic Growth	
Data/parameter:	Quantitative employment and income generation	
Unit	- Number (employees) - INR (salary)	
Description	- Number of project employees with Number of male/female, permanent/temporary, age and person with disabilities. - Salary given to the employees of the project.	
Source of data checked by the assessment team	Training Records ^{07/} and Salary slips of the project Employees ^{22/}	

Value(s) of monitored parameter	Assessment team checked that for Quantity of employment and income generation. Employment is given in office work, O&M, Security etc. A total of 66 employments given during monitoring period. The employment records for the monitoring period is checked by the assessment team and found correct. <table border="1"> <thead> <tr> <th>Project proponent</th><th>No of Employees</th></tr> </thead> <tbody> <tr> <td>Mahindra Renewables Private Limited</td><td></td></tr> <tr> <td>2021</td><td>37 (6 unskilled + 31 skilled)</td></tr> <tr> <td>2022</td><td>37 (10 unskilled + 27 skilled)</td></tr> </tbody> </table> Employee salaries: - The wage rates can be referred from the Indian labour act Labor bureau, Government of India notifications⁹ The unskilled labor for the project activity Is cleaner, loading/unloading watchman. Our project activity falls under category Area B. hence the following cost is used. Cleaner- Rs 466/day, watchman-Rs 617/day, loading /unloading-Rs 466/day During monitoring period skilled people salary: - Engineer-1093/day Diploma Trainee Engineer-724.8/day	Project proponent	No of Employees	Mahindra Renewables Private Limited		2021	37 (6 unskilled + 31 skilled)	2022	37 (10 unskilled + 27 skilled)
Project proponent	No of Employees								
Mahindra Renewables Private Limited									
2021	37 (6 unskilled + 31 skilled)								
2022	37 (10 unskilled + 27 skilled)								
Means of verification:	The value for number of employments created is taken from Plant employment records (daily attendance register). The value for Cost Spent for salaries is taken from Salary slips ^{22/} . Verification team interviewed some employees and Local stakeholders.								
Cross check mechanism	Not applicable								

Relevant SDG outcome has been included in ER sheet^{102/} and have been found correct.

During the interviews with PP, the verification team confirmed that there is a grievance book at project site. Every stakeholder has access to the grievance register^{14/} and can lodge grievance any time. Same if any is resolved as per the standard operating procedures of the company. By checking grievance book^{14/} submitted by PP, it was able to confirm there are no comments received from the local people for the current monitoring period. Local people are happy with the implementation of the project activity as it entrusts employment and improve living standard of local people and villagers.

Assessment team also checked the Indian domestic (<https://www.recregistryindia.nic.in/>) & International REC device registry (<https://evident.services/device-register>) and confirms that the project is not undertaking any REC benefits at present nor intended to take it in near future.

Assessment team also checked the other registry like UNFCCC and VCS and found that project is not registered with both mechanisms.

Applus+ Certification conducted an interview with the project owner and local stakeholders please find the summary of the interview as below:

⁹ <https://labour.gov.in/sites/default/files/MW%20PDF.pdf>

Sections	Debriefing
Trainings & salaries of the employees	During verification process Mr. Saurabh Mehta, PP representative team was interviewed. It was noted that regular technical & nontechnical trainings ^{07/} were conducted and the salaries are in line with the industry standard.

In Summary, it is Applus+ Certification's opinion that the monitoring of the project owner regarding to sustainability is in line with requirement of the GS4GG guideline.

Summary of ex-post values of each SDG outcome for the current monitoring period

Item	Baseline estimate	Project estimate	Net benefit
SDG 7: Affordable and Clean Energy	0 MWh	932,083.61 MWh	932,083.61 MWh
SDG 8: Decent Work and Economic Growth	0 Training provided to O&M Staff 0 million INR spent on O&M 0 employment generation	66 Training provided to O&M Staff 37 employment generation with income 477 INR/day	No. of trainings conducted: 66 No. of employment opportunities created: 37 with income 477 INR/day
SDG 13: Climate Action	867,303 tCO ₂ e	0 tCO ₂ e	867,303 tCO ₂ e

Comparison of actual value of outcomes with estimates in approved GS PDD

Item	Values estimated in ex ante calculation of approved PDD	Actual values achieved during this monitoring period
SDG 7: Affordable and Clean Energy	870,229.20 MWh	932,083.61 MWh
SDG 8: Decent Work and Economic Growth	02 Training provided to O&M Staff 15 employment generation	66 Training provided to O&M Staff 37 employment generation
SDG 13: Climate Action	809,757.96 tCO ₂ e	867,303 tCO ₂ e

3.6 Assessment of Data and Calculation of Greenhouse Gas Emission Reductions

As a result of verification of the ER calculation process, the assessment team confirmed that all the parameters required for the determination of the emission reductions have been included in the Monitoring Report Version 01 & Monitoring report Version 04^{/01/} and corresponding ER calculation spread-sheets^{/02/} and are consistent with the applied methodology ACM0002 Version 20.0^{/04/} and the monitoring plan contained in the registered PDD^{/03/}. The parameters are complete in this monitoring period.

After verifying the reported figures with the raw data sources, it's confirmed that the values of the parameters from the raw data sources are consistent with those quoted in the Monitoring Report Version 01 & Monitoring report Version 04 and corresponding ER calculation spread-sheets. The verification process for the same has been clearly described in above section of the report. See below for the detailed data:

Baseline Emissions for the amount of electricity supplied by project activity, BE_y is calculated as:

The baseline emission is using equation below:

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

Where,

BE_y = Baseline emissions in year y, (tCO_{2e}/yr)

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

$EF_{grid,CM,y}$ = Combined margin CO₂ emission factor for grid connected power generation in year y

Calculation of $EG_{PJ,y}$:

The project activity is the installation of solar projects, and it is a green field project. So the formula in option (a) i.e., greenfield plants is used to calculate the value of $EG_{PJ,y}$. In accordance with para 46 of the applied methodology:

$$EG_{PJ,y} = EG_{facility,y}$$

Where:

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

$EG_{facility,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr).

$$BE_y = EG_{facility,y} \times EF_{grid,CM,y}$$

$$BE_y = 932,083.61 \times 0.9305 = 867,303 \text{ tCO}_2\text{e (round down figure)}$$

Thus, the baseline value of each SDG outcome are summarised as follows;

Item	Baseline value
SDG 7: Affordable and Clean Energy	No Activities in the baseline
SDG 8: Decent Work and Economic Growth	No Activities in the baseline
SDG 13: Climate Action	Emission of 867,303 tCO _{2e}

Project emissions:

The project is a solar power project, no fossil fuel is consumed according to the methodology ACM0002 Version 20.0 & according to registered PDD, $PE_y = 0 \text{ tCO}_2\text{e}$

Leakage:

As per ACM0002 Version 20.0, No leakage emission needs to be considered.

Emission reductions:

Thus, the emission reductions are:

$$ER_y = BE_y - PE_y$$

$$= 867,303 - 0 = 867,303 \text{ tCO}_2\text{e}$$

The actual achieved emission reduction for this monitoring period is 7.11% higher than estimated value in the GS PDD (867,303 tCO₂e against estimated 809,757.96 tCO₂e for 597 operational days). The increase in actual emission reduction electricity depends upon many other climatic conditions, which are not within the control of the project participant, since during the current monitoring period, Also being a solar power project, the generation is nature dependent. Thus, acceptable to VVB. Further no design change in the project activity has taken place.

During the assessment, the evaluation team noted that the current monitoring period extends from 14/05/2021, to 31/12/2022. In 2021, the project underwent a phased commissioning process as outlined below:

Capacity	Commissioning Date
100	14/05/2021
60	08/06/2021
50	24/07/2021
40	17/08/2021

Furthermore, in the year 2021, the VVB team noticed the absence of a reasonable method for assessing the phased generation of the 250 MW project activity, making it inappropriate to compare the estimated Plant Load Factor (PLF) with the actual PLF. As a result, the assessment team compared the estimated generation VS actual generation for year 2022 where complete year data of total installed capacity of 250 MW available.

During year 2022, 365 days

Actual generation = 622,919.55 MWh (As per Generation Records)

Actual PLF = 28.44% (Calculated)

Estimated Generation = 573,561 MWh (As per registered PDD)

Estimated PLF = 26.19% (As per registered PDD)

Variation in PLF (for 2022 year) = + 8.61 %

The actual Plant Load Factor (PLF) achieved during the current verification period for the 250 MW project in 2022 is 28.44%. This is higher than the PLF of 26.19% as initially stated in the registered Project Design Document (PDD) and demonstrates an increase in PLF during this period. However, even with this increased PLF, the equity Internal Rate of Return (IRR) remains at 8.73%, which is below the benchmark value of 15.98%. This is because the threshold for breaching based on the variation in PLF is +28.35%, while the actual variation in PLF is +8.61%, which falls within acceptable limits. Therefore, the results are considered acceptable for this

verification however, FAR 01 is raised to assess any increased generation in next verification compared to estimated values in registered PDD. Refer Appendix 01 for details of FAR raised.

3.7 Management and Operational System

The responsibilities of data measurement, collection, verifying, archiving etc. have been clearly defined in the registered PDD version 8.0. The same practice is followed onsite and it is confirmed by the assessment team during the interviews with PP. The data related to ER calculation as well as data monitoring, collection process etc. have been internally reviewed by the management of the Monitoring team regularly. The responsibility of each function is consistent with the monitoring plan in the registered PDD.

The information flow of each parameter has been verified by the assessment team via interviewing with responsible personnel.

It's verified during the interviews with PP & document review, the monitoring procedure as well as the internal quality management and control procedures are stipulated in the PDD. The monitoring personnel have been interviewed by the assessment team and it's confirmed that the monitoring is implemented as per the procedure. Also, the training record has been checked by the assessment team and it is confirmed that the monitoring personnel are get sufficient train to perform the monitoring.

All the data and documents, either hard copies or soft copies, is kept for two years after the end of the last crediting period or the last issuance of GS VERs for this Project, whichever occurs later.

4. REFERENCE

LIST OF DOCUMENTS	
S. No.	Document/Evidence/Reference/Web link, Version, Date
1.	Monitoring Report Version 01 dated 09/06/2023, Final Monitoring report version 04 dated 01/11/2023
2.	ER sheets Version 01 dated 09/06/2023, Final ER Sheets version 04 dated 01/11/2023
3.	Registered PDD Version 08 dated 21/11/2022, Final GS Validation report version 04 dated 21/11/2022 GS Design review document
4.	ACM0002 Version 20.0 "Tool to calculate the emission factor for an electricity system" https://cdm.unfccc.int/UserManagement/FileStorage/58IAGB7SZUDEO2VN6LYM30K41HFPRQ
5.	CDM validation and verification standard for project activities, Version 03.0 GS validation and verification standard for project activities, Version 01.0
6.	GS4GG Principles and Requirements v.1.2 https://globalgoals.goldstandard.org/101-par-principles-requirements/ GS4GG Guidelines
7.	Training records of the employees (both skilled/non-skilled) • Safety Induction dated 26/09/2022 • Technical training dated 26/12/2022 • Covid-19 Awareness Program dated 02/02/2022 • Risk at site training dated 16/10/2021
8.	Monthly reports issued (REA statements by NRPC) state utility and invoices raised by PP for the complete monitoring period
9.	Calibration certificates of the complete monitoring period issued by Secure meters limited
10.	Commissioning certificates issued by Solar Energy Corporation of India Ltd. for the below capacities: • 100 MW Capacity Solar PVs commissioned on dated 14/05/2021 • 60 MW Capacity Solar PVs commissioned on dated 08/06/2021 • 50 MW Capacity Solar PVs commissioned on dated 24/07/2021 • 40 MW Capacity Solar PVs commissioned on dated 17/08/2021
11.	Declaration of no double counting dated 27/03/2023
12.	Hazardous Waste Records for the complete monitoring period
13.	Waste disposal Policy • E-Waste Agreement dated 31/08/2022 between Mahindra Teqo private limited and Limbra E-waste Company

LIST OF DOCUMENTS	
S. No.	Document/Evidence/Reference/Web link, Version, Date
	Hazardous waste Agreement dated 30/04/2022 between Mahindra Teqo private limited and Karrecycle Centre LLP
14.	Grievance register placed at site for the current monitoring period
15.	HSE procedures, HR records and daily attendance register
16.	Power purchase agreement between MPRL and Solar Energy Corporation of India Limited dated 28/12/2018
17.	O&M agreement
18.	No major breakdown occurred during the Current Monitoring Period. Only few minor breakdowns occurred which are described in MR Appendix 01, 3. Breakdown details
19.	Technical Specification of Solar PV Module from the Manufacturer Jinko and Canadian Solar
20.	Deviation Settlement Account by Northern Regional Power Committee for the current monitoring period
21.	Employment records
22.	Sample salary slips
23.	"GHG emissions reduction & sequestration product requirements" version 2.1
24.	SDG Impact Tool

5. **FINAL VERIFICATION STATEMENT**

Applus+ Certification has been engaged by EKI Energy Services Limited to perform the 1st periodical verification of the “250 MW Solar PV Plant by Mahindra Renewables in Rajasthan” (GS Ref. No. GS 7664).

The management of Mahindra Renewables Private Limited is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project’s Monitoring Plan in the registered PDD and the applied methodology ACM0002 Version 20.0.

Our verification approach was based on the requirements as defined under the Kyoto Protocol, Marrakesh accord, as well as those defined by the CDM Executive Board and Gold Standard. Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. A reasonable level of assurance has been achieved during this verification. The verification can confirm that:

- the project is operated as planned and described in the project design document and PDD approved by the EB and GS;
- the monitoring plan is as per the applied methodology;
- the monitoring in Monitoring Report is as per the PDD and the monitoring plan approved by the EB and GS;
- the development and maintenance of records and reporting procedures are in accordance with the registered monitoring plan;
- the installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately;
- the monitoring system is in place and generates GHG emission reductions data;
- the GHG emission reductions are calculated without material misstatements.

In our opinion, the GHG emission reductions for “250 MW Solar PV Plant by Mahindra Renewables in Rajasthan” for the monitoring period 14/05/2021 to 31/12/2022 (Both days included) as reported in Monitoring Report, prepared on the basis of the project’s Monitoring Plan are fairly stated.

Based on the information we have seen and evaluated, we confirm the following statement:

Reporting period: 14/05/2021 to 31/12/2022 (Both days included)

Verified emissions in the above reporting period:

Leakage emissions	0 tCO ₂ e equivalents
Project emissions	0 tCO ₂ e equivalents
Baseline emissions	867,303 tCO ₂ e equivalents
Emission reductions	867,303 tCO ₂ e equivalents

Vintage wise breakup of verified emission reduction is given below:

For **SDG 13:**

Year	Baseline emission (tCO ₂)	Project Emission (tCO ₂)	Emission Reduction (tCO ₂)
Year 2021	287,677	0	287,677
Year 2022	579,626	0	579,626
Total	867,303	0	867,303

For **SDG 7:**

Year	Baseline estimate	Project estimate (MWh)	supplied to grid to grid (to grid (MWh)
Year 2021	0	309,164.06	309,164.06
Year 2022	0	622,919.55	622,919.55
Total	0	932,083.61	932,083.61

For **SDG 8:**

Vintage	No of training	Number of O&M Staff
Year 2021	4	37
Year 2022	62	37
Total	66	37

Date: 30/05/2024

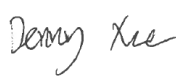
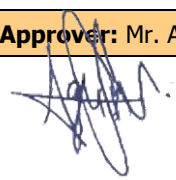
Lead Auditor: Dr. Atul Takarkhede

Tech. Expert: Dr. Atul Takarkhede

Tech. Reviewer: Mr. Denny Xue

Approver (*Applus+ Certification VVB Technical Manager*)

Mr. Agustín Calle de Miguel

ASSESSMENT TEAM	
Lead Auditor: Dr. Atul Takarkhede	Technical Reviewer: Mr. Denny Xue
Signature: 	Signature: 
Approver: Mr. Agustín Calle de Miguel	
Signature: 	

Appendix 1: Corrective Action Request/Clarification Request/Forward Action Request resolution table

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	01
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	1.0
Description of the audit finding		Date:	31/08/2023
During desk review, VVB team observed that Total phase-wise capacity mentioned in the A.1 section of the MR is less than actual capacity of the project i.e., 250 MW. Same is not inline with the supporting documents provided. Kindly clarify.			
Project Participant's response		Date:	08/09/2023
Total Capacity of the project is 250 MW and the total phase wise capacity is also now have been mentioned in MR along with commissioning date. Commissioning certificate has been provided as evidence for VVB reference.			
Documentation provided as evidence by Project Participant			
Commissioning Certificate			
Auditor's assessment comment		Date:	14/09/2023
PP has updated the total capacity of the project 250 MW in the MR section A.1 which is now inline with the commissioning certificates provided by the PP. Thus, CL#01 is Closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	01
Raised by:	Sustain-cert	Ref. to checklist in above tables:	N/A
Description of the audit finding		Date:	31/08/2023
FAR#01 raised during Design review: Remote audit shall be resumed by VVB when Covid-19 situation eases as per Interim Measures para 4.2.1. The VVB shall conduct site visit to confirm project WTGs implementation and specification, implementation of monitoring plan, interview with the stakeholder to confirm SDG benefits and grievances (if any).			
Project Participant's response		Date:	08/09/2023
Physical site audit has been conducted by VVB in this monitoring period. Technical specification of equipment's, implementation of monitoring plan, grievance register have been checked by VVB during site audit and copy of the same have been provided to VVB.			
Documentation provided as evidence by Project Participant			
Technical specification of equipment's, Grievance register			
Auditor's assessment comment		Date:	14/09/2023
VVB team has conducted the physical site visit on date 24/07/2023 where it is confirmed that project WTG implementation and specifications are as per the registered PDD. Monitoring equipment's are located on the site as per the monitoring plan. VVB team has interviewed the local stakeholder where no grievances are found on the plant site. Trainings related to project are also conducted at the site. Copy of the supporting documents are submitted to the VVB team. Thus, CAR#01 is closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	02
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.3
Description of the audit finding	Date: 31/08/2023		
PD is requested to update the MR based on below observation: 1. All sections of GS MR as per latest template guideline of GS4GG v.1.1 2. VVB team has observed the editorial mistakes throughout the MR. Update font and format of all the sections of MR. 3. PD has used futuristic language throughout the MR. PD to revise the language as project is already commissioned. 4. During assessment it is observed that Tool number of various Tools is found missing in some sections of the submitted MR. Thus, corrective action sought.			
Project Participant's response	Date: 08/09/2023		
1. All sections of MR are now updated with latest template guidelines of GS4GG. 2. PD has corrected Editorial mistakes, also updated font and format throughout MR. 3. Language is now revised in MR. 4. Tool no's of various tool is now mentioned in MR.			
Documentation provided as evidence by Project Participant			
Monitoring Report			
Auditor's assessment comment	Date: 14/09/2023		
1. Project Developer has now updated all the sections of monitoring report as per the latest Template guidelines of GS4GG v.1.1 2. PD has updated the editorial mistakes, font and format throughout the revised MR version 02.0 which are found correct. It is accepted to the VVB. 3. PD has revised the language throughout the MR version 02.0. 4. PD has updated the Tool numbers of all Tools in the MR version 02.0. Thus, CAR#02 is closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	03
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.8
Description of the audit finding	Date: 31/08/2023		
Project Developer is requested to provide the JMR to cross check the electricity generation values in the ER sheet. PD has submitted Invoices for the current monitoring period. However, Invoice of November month is found missing. Corrective action sought.			
Project Participant's response	Date: 08/09/2023		

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	03
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.8
REA database and Invoices for the whole monitoring period is provided to VVB.			
Documentation provided as evidence by Project Participant			
REA database & Invoice			
Auditor's assessment comment		Date:	14/09/2023
PD has submitted the REA database for current monitoring period. Electricity generation values in REA database are inline with the ER sheet. Invoice of the November month is submitted to the VVB which is inline with the ER sheet. Thus, CAR#03 is closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	04
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.8
Description of the audit finding		Date:	31/08/2023
1. PD has submitted the Technical Specifications of the Solar PV modules and Invertors. However, section B.1 is not inline with the technical specifications provided. 2. Following discrepancies observed in the section D.2, Data and parameters monitored in the submitted MR: i. Parameter 'EG_{facility,y}' at SDG 7.2.1 in the MR is not inline with the registered PDD. ii. PD has mentioned the JMR/B-Form as the source of data which is not inline with the project site. iii. Kindly mention the full Calibration details of the meter of the project activity. iv. CEA guidelines web-link is showing the Assam electricity Borad website. Kindly attach the web-link showing the CEA guidelines. 3. Kindly mention trainings only related to the EHS and Technical of the project in the Appendix 01. 4. Project Developer is requested to provide the Single Line Diagram of the project site in the Section C of the MR. Thus, corrective action sought.			
Project Participant's response		Date:	08/09/2023

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	04
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.8
- There were typo error in the registered PD in Dimensions and weight of solar panel of Jinko Solar PV module and in Type of Canadian Solar panel which is now corrected in Monitoring report as per the actual technical specification of the equipments. There is no impact of these changes on plant capacity (250 MW_{AC} / 362 MW_{DC}), scale and additionality of the project activity. Technical specification of equipments have been provided to VVB as evidence. - PD has updated the discrepancies in the section D.2, Data and parameters monitored in the revised MR version 02.0: - Parameter 'EG_{facility,y}' at SDG 7.2.1 in the MR is now corrected to EG_{PJ,grid,y} which is aligned with registered PDD. - REA database serve as the source of data for recording generation of electricity which is available at site:- Source: http://164.100.60.165/welcome.htm > Commercials>Regional Energy Account>Final REA For each month data can be downloaded from this site and the same document has been provided to VVB as well as it is aligned with source of data mentioned in table of Section D.2. - Meter accuracy, class, Meter no. and type has been provided in Appendix 01 of MR. - Correct CEA guideline link is now attached in MR. - Trainings related to EHS and Technical of the project has now been mentioned in the Appendix 01. - Single Line diagram has now been updated in Section C of MR.			
Documentation provided as evidence by Project Participant			
- Technical Specification of the project activity - Revised MR / REA documents - Training Records - Single Line diagram			
Auditor's assessment comment		Date:	14/09/2023

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	04
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.8
1. There were typo error in the registered PD in Dimensions and weight of solar panel of Jinko Solar PV module and in Type of Canadian Solar panel which is now corrected in Monitoring report as per the actual technical specification of the equipments. There is no impact of these changes on plant capacity (250 MW_{AC} / 362 MW_{DC}), scale and additionality of the project activity. PD has now corrected typo error of the technical specifications of the Solar power modules in the section B.1 of the revised MR version 02.0 which are now inline with the technical specifications provided to the VVB. 2. Under the Section D.2, Data and parameters monitored in the submitted revised MR version 02.0, Project developer has updated the following: i. PD has corrected the Parameter 'EG_{facility,y}' at SDG 7.2.1 in the MR as 'EG_{PJ,grid,y}' which is now inline with the registered PDD. ii. PD has now corrected the Source of data as Statement of net export of power to the grid at the plant site (REA) which is now inline with the project site and REA database document provided to the VVB. iii. PD has updated the meter calibration the details i.e., Meter number, Make, Calibration date, accuracy class, type of meter and due date of calibration of meter in the Appendix 01 of the revised MR version 02.0 which was cross verified with the Calibration certificates. During assessment VVB found that meter calibration details are correct. iv. PD has corrected the CEA database guidelines weblink in the section D.1 of the MR. 3. PD has now mentioned the Trainings related to EHS and Technical of the project in the Appendix 01 of the revised MR version 02.0. 4. PD has updated the Single line diagram in the Section C of the GS-MR. Thus, CAR#04 is Closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	05
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.7
Description of the audit finding		Date:	31/08/2023
During assessment of ER sheet below inconsistencies observed: 1. Kindly mention actual (LU) values of May-21 month from start date of monitoring period, 14-05-2021 in the 'Actual generation' Tab. 2. Web-link mentioned in the Actual generation' Tab is not relevant to the project activity. 3. Generation Value mentioned in ER sheet is not found in JMR. Thus, corrective action sought.			
Project Participant's response		Date:	08/09/2023
1. Actual value from 14-05-2021 has been updated in the "Actual generation" Tab. The value from the 14/05/2021 to 22/05/2021 is "Zero" as the plant was stabilization mode during this period. 2. Weblink is provided for referring the generation data from REA database. 3. JMR (Monthly REA database) has been provided which can be cross checked with values mentioned in ER sheet.			
Documentation provided as evidence by Project Participant			
JMR (Monthly REA database)			
Auditor's assessment comment		Date:	14/09/2023

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	05
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.7
PP has updated the following in the ER sheet as: 1. PD has mentioned the actual (LU) values of electricity generation in the 'Actual generation' Tab which is now updated from the start date of the monitoring period. VVB has cross checked the same with REA database and site personnel interviews. 2. PD has updated the web-link for the REA database generation data which is now operational and it's showing the REA database for generation values. 3. PD has submitted the REA database to cross check the generation value mentioned in the ER sheet. During assessment it is found that REA statements are inline with the ER sheet. Thus, CAR#05 is closed.			

Type:	☐ CAR ☐ CL/CR ☒ FAR	Number:	01
Raised by:	Atul Takarkhede	Ref. to checklist in above tables:	N/A
Description of the audit finding		Date:	01/11/2023
During first verification, VVB observed higher emission reduction than estimate, thus Next VVB requested to reassess the additionality if PLF has increased, and the registered equity IRR reaches the benchmark. In such case, the issuance will be capped at the registered PDD estimated of SDG 13 in accordance with Assessment approach for reporting higher ex-post emission reductions – Gold Standard for the Global Goals.¹⁰			
Project Participant's response		Date:	DD/MM/YYYY
-			
Documentation provided as evidence by Project Participant			
-			
Auditor's assessment comment		Date:	DD/MM/YYYY
-			

¹⁰ <https://globalgoals.goldstandard.org/rc-2022-assessment-approach-for-projects-overachieving-emission-reductions/>

Appendix 2: Calibration details of monitoring meters

Details of Meter Calibration:

Meter Number Serial No.	Make	Type of Meter	Accuracy class	Calibration date	Due Date	Delay in calibration
NS1126A	Secure	MCR line ABT Main meter at our end	0.2s	25/02/2020	24/02/2025	No delay
NS1128A	Secure	Main meter at bhadla 2 PGCIL end	0.2s	25/02/2020	24/02/2025	No delay
NS1129A	Secure	Check meter at bhadla 2 PGCIL end	0.2s	25/02/2020	24/02/2025	No delay

Appendix 3: Audit Team CVs

Name	SHORT CV. BACKGROUND INFORMATION
Dr. Atul Takarkhede	Dr. Atul Takarkhede is Ph.D. (Environmental Sciences) from Institute of Science, RTM Nagpur University, Nagpur, and he has already published different technical papers related to environmental sciences. He counts with more than 11 years of experience in field of Environmental Auditing, consulting and accreditation. He is an expert in ISO 9001-14001, CO2/GHG Reporting, Carbon Foot Print, Energy, Water and Waste Management reporting for organizations' environmental performance. His professional portfolio is mainly related with carrying out EIA, conducting QA/QC of EIA Reports; conducting environmental/water audits; NABET requirements appliance, functional area expert in Water Pollution & Solid & Hazardous Waste management among others. Furthermore, he counts with solid experience on CDM-VCS-GS consultancy and auditing. Currently he is associated with True Quality Certifications Private Limited and empanelled with Applus+ Certification to carry out GHG audits in the aforementioned schemes.
Mr. Ishan Shrivastava	Mr. Ishan Shrivastava, has done bachelor of engineering in Mechanical Engineering from Rajiv Gandhi Proudhyogiki Vishwavidyalaya, India. He has a year of working experience in India's one of the Maharatna Company i.e. GAIL (India) Limited in the area of Natural Gas, Energy & Environment. Currently, He is working in True Quality Certifications Pvt. Ltd. (An outsource entity for LGAI Technological Center, S.A. (Spain) "Applus+ Certification") since 2019 and has been involved as Auditor (Validator/Verifier) for Validation and Verifications of Project Activities (Renewable and non- renewable projects) under CDM/VCS/GS4GG/GCC programs. Mr. Ishan Shrivastava is based in Indore, India. Mr. Ishan Shrivastava participate as part of the Audit Team as Auditor for the assessment.
Mr. Denny Xue	Mr. Denny Xue (Master's Degree in Environmental Engineering, Bachelor's Degree in Thermal Engineering) is an Auditor appointed by Applus+ LGAI for the GHG project assessment, auditing and technical review. He has more than 6 years of work experience in CDM/GS4GG/VCS project assessment and technical review with Applus+. Before he joined Applus+ LGAI, he has been working for Shanghai Chuanji Investment and Management which is a CDM consultancy company as a project manager for CDM project development. Mr. Denny Xue is based in Shanghai, China. Mr. Denny Xue participates in the project's technical review team.

Appendix 04: Audit Technique

AUDITING TECHNIQUES REPORT							
For Performance Certification							
Scope of assessment	Auditing technique(s) used ^[1]	Has the audit technique(s) been sufficient to validate the aspect? ^[2]	Risk(s) identified ^[3]	Auditing tools used as a part of mitigation of identified risks ^[4]	Findings raised ^[5] (if applicable)	Conclusion	Reference to the key evidence supporting the Conclusion
DESCRIPTION OF PROJECT							
General description of project	On-site audit, Conducting site interviews of project developer representative, Documents shared by PD during on-site audit To review: - documentation/ documentary evidence(s)	Yes	No		CL 01 and CAR 02 was raised and was successfully closed.	Positive	Monitoring Report submitted documents
Location of project	On-site audit	Yes	No		CAR 01 was raised and was successfully closed.	Positive	Monitoring Report submitted documents
Reference of applied methodology	Document Review	Yes	No		N/A	Positive	MR and UNFCCC
Crediting period of project	Document Review	Yes	No		N/A	Positive	Monitoring Report
IMPLEMENTATION OF PROJECT							

Description of implemented project	On-site audit, conducting site interviews of project developer representative, Documents shared by PD during on-site audit To review: - documentation/ documentary evidence(s)	Yes	No		CAR 04 was raised and successfully closed	Positive	NA
Post-Design Certification changes	Document Review	Yes	No		N/A	Positive	NA
Description Of Monitoring System Applied by The Project	On-site audit, Conducting site interviews of project developer representative, Documents shared by PD during on-site audit To review: - documentation/ documentary evidence(s)	Yes	no		CAR 04 was raised and successfully closed	Positive	MR, Calibration certificate
DATA AND PARAMETERS							
Data And Parameters Fixed Ex Ante Or At Renewal Of Crediting Period	Document Review	Yes	No		N/A	Positive	MR and Tool to calculate the emission factor for an electricity system
EF _{grid,OM,y}	Document Review	Yes	No		N/A	Positive	MR and Tool to calculate the emission factor for an electricity system

EF _{grid,BM,y}		Yes	No		N/A	Positive	MR and Tool to calculate the emission factor for an electricity system
EF _{grid,CM,y}	Document Review	Yes	No		N/A	Positive	MR and Tool to calculate the emission factor for an electricity system
Data and parameters monitored							
CO ₂ Emissions Reduction	Document Review	Yes	No		CAR 05 was raised and closed successfully.	Positive	NA
EG _{PJ,grid,y}	Document Review	Yes	No		CAR 03 was raised and closed successfully.	Positive	N/A
Quantitative employment	Document Review	Yes	No		N/A	Positive	N/A
Quality of employment	Document Review	Yes	No		CAR 04 was raised and closed successfully.	Positive	N/A
Income Generation	Document Review	Yes	No		N/A	Positive	N/A
Comparison of monitored parameters with last monitoring period	NA	No	No		N/A	Positive	N/A

Implementation on of sampling plan	Not Applicable	No	No		N/A	Positive	N/A
CALCULATION OF SDG IMPACTS							
Calculation of baseline value or estimation of baseline situation of each SDG Impact	Documents shared by PD during on-site audit To review: documentation/ documentary evidence(s)	Yes	No		N/A		Applied methodology ACM0002: Grid-connected electricity generation from renewable sources - Version 20.0

Calculation of project value or estimation of projectsituation of each SDG Impact	NA	No	No		N/A		NA
Calculation of leakage	NA	No	No				NA
Calculation of net benefits or direct calculation for each SDG Impact	Documents shared by PD during on-site audit To review: documentation/ documentary evidence(s)	Yes	No		N/A	Positive	N/A

Comparison of actual SDG Impacts with estimates in approved PDD	Documents shared by PD during on-site audit To review: documentation/ documentary evidence(s)	Yes	No		N/A	Positive	N/A
Explanation of calculation of value estimated ex ante calculation of approved PDD for this monitoring period	Documents shared by PD during on-site audit To review: documentation/ documentary evidence(s)	Yes	No		N/A	Positive	N/A
Remarks on increase in achieved SDG Impacts from estimated value in approved PDD	Documents shared by PD during on-site audit To review: documentation/ documentary evidence(s)	Yes	No		N/A	Positive	N/A
Safeguards Reporting	Documents shared by PD during on-site audit To review: documentation/ documentary evidence(s)	Yes	No		N/A	Positive	NA
STAKEHOLDER INPUTS AND LEGAL DISPUTES							

All Inputs and Grievances which have been received via the Continuous Input and Grievance Mechanism together with their respective responses/mitigations.	Conducting interviews of project developer, staffs and end users Documents shared by PD during On-site audit To review: - documentation/ documentary evidence(s)	Yes	No		N/A	Positive	Grievance register submitted and verified.
Report on any stakeholder mitigations that were agreed to be monitored	Conducting interviews of project developer, staffs and end users Documents shared by PD during On-site audit To review: - documentation/ documentary evidence(s)	Yes	No		N/A	Positive	PP is monitoring the parameters as per the GS4GG PDD and no deviation was found during the assessment.
Legal contest that has arisen with the project during the monitoring period	Conducting interviews of project developer, staffs and end users Documents shared by PD during On-site audit To review: documentation/ documentary evidence(s)	Yes	No		N/A	Positive	No, the project already obtained statutory clearances.