

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



Project Title:	21 MW Wind Energy Project by Shree Cement Limited
Monitoring Period:	01/01/2021 to 27/03/2023 (inclusive of both dates)
GS project ID:	GS 6999
Internal ID:	TQC 10223
Customer:	Shree Cement Limited
Date:	12/03/2024
Revision:	01.2

SUMMARY			
Reference No.	Date (first version)	Version No.	Date (last version)
A+SH_SYST_TQC_GS_VER_10223	09/08/2023	01.3	12/03/2024
GS4GG Verification			
GS4GG Certified Product (sought):		GHG Emission Reductions	
GS4GG SDG Impact Statement (sought):		Impact Certification	
General Information			
Client	Shree Cement Limited		
Project Title	21 MW Wind Energy Project by Shree Cement Limited		
Project Participants	Shree Cement Limited		
Project Location	The project activity is located in Kushtagi Wind Farm in Koppal district, Karnataka, India		
Contact Person	Mr. Sanjay Singh		
Monitoring Period	01/01/2021 to 27/03/2023 (inclusive of both dates)		
GS4GG Version: GS4GG Principles and Requirements 1.2 GS4GG Activity Requirements: RE Activity Requirements 1.4 Applied Methodology Version: ACM0002 Version 20.0 Consolidated baseline methodology for grid-connected electricity generation from renewable sources.		GS4GG Sectoral Scope: 2 UNFCCC CDM Sectoral Scope: 1 Technical Area: 1.2	
Published Monitoring Report Version: 01 Date: 17/04/2023		Final Monitoring Report Version: 07 Date: 08/03/2024	
Certified Project Design Document Version: 04 ¹ Date: 06/12/2019 GS Passport Version (if applicable): NA			
Ex ante estimate of SDG goals: SDG 7 (Affordable and clean energy): 47,829 MWh/year SDG 8 (Decent work and economic growth): 1 training/annum and 10 people employed SDG 13 (Climate action): 44,806 tCO ₂ e/annum			
Actual SDG goals achieved during monitoring period: SDG 7 (Affordable and clean energy): 93,603.62 MWh SDG 8 (Decent work and economic growth): Total 84 people employed and 07 training conducted SDG 13 (Climate action): 87,687 tCO ₂ e			
Selected Sustainable Development Goals (SDGs): 7, 8 and 13			
Verification Summary			
LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by Shree Cement Limited to perform the 3 rd periodic verification under 1 st crediting period of "21 MW Wind Energy Project by Shree Cement Limited" (Ref. No. GS 6999) applying the methodology ACM0002 Version 20.0. The management of Shree Cement Limited is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions.			
A desk review and interviews have been conducted to verify the data submitted in the monitoring report. Applus+ Certification confirms the following have been reviewed: a. The GS4GG PDD Version 04 including the monitoring plan; b. Monitoring report(s); c. The applied monitoring methodology; d. Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board;			

¹ <https://registry.goldstandard.org/projects/details/1454>

- e. The Gold Standard for Global Goals “Principles and Requirements” Version 1.2 and GS4GG guideline and related Annex.
- f. All information and references relevant to the project activity’s resulting in emission reductions.

Shree Cement Limited has implemented a Greenfield “**21 MW Wind Energy Project by Shree Cement Limited**” large-scale grid connected wind power project (“Project activity”) in the state of Karnataka, India. The project activity involves installation and operation of 10 Wind Turbine Generators (WTGs) of 2.1 MW Suzlon S-97 model.

Electricity generated from the project activity is exported to the Indian electricity grid. As per registered GS4GG PDD, the net electricity generation from the project activity is estimated as 47,829 MWh/year and abates a total of 224,030 tonnes of Carbon Dioxide emissions during its entire crediting period (28/03/2018 to 27/03/2023).

As a part of current verification, 02 CARs and 03 CLs were raised and successfully closed. No FAR was raised during this verification.

Applus+ Certification confirms that the project is implemented in accordance with the validated registered PDD. The monitoring plan complies with the applied methodology ACM0002, Version 20.0 /09/ and the Gold Standard for Global Goals “Principles and Requirements” Ver.1.2 /10/. 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 87,687 tCO₂e emission reductions during period 01/01/2021 to 27/03/2023 (inclusive of both dates).

ASSESSMENT TEAM		
Team Members	Type of Resource ²	Organization (for OEs)
Lead Auditor/ Technical Expert: Mr. Deepak Pundlik	☐ IR ☐ EI ☒ OE	M/s True Quality Certifications Private Limited
Auditor: Mr. Pankaj Kumar	☐ IR ☐ EI ☒ OE	M/s True Quality Certifications Private Limited
Technical Reviewer: Mr. Denny Xue	☐ IR ☒ EI ☐ OE	LGAI Technological Center, S.A.

² IR (Internal Resource); EI (External Individual); OE (Outsourced Entity)

ABBREVIATIONS	
ACM	Approved Consolidated Methodology
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
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
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
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 Shree Cement Limited to perform the 3rd periodical verification of "21 MW Wind Energy Project by Shree Cement Limited" applying the methodology ACM0002, Version 20.0 and GS4GG guidelines. 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 GS PDD and transitional documents for registration 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 VVS for project activities version 03 and GS4GG Validation and Verification Standard, version 1.0 for the project activity and Gold Standard i.e. and 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.

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 VVB. The verification is based on the submitted monitoring report, the validated PDD V04 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 VVS for project activities, version 03 for the project activity as well as the GS4GG guidelines, Applus+ Certification has applied a risk-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 sustainable parameters.

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

Shree Cement Limited has implemented a Greenfield “21 MW Wind Energy Project by Shree Cement Limited” (Project activity). The project activity involves installation and operation of 10 Wind Turbine Generators (WTGs) of 2.1 MW Suzlon S-97 model. Electricity generated from the project activity is exported to the Indian electricity grid. As per the registered PDD, the net electricity generation from the project activity is estimated as 47,829 MWh/year and abates a total of 224,030 tonnes of Carbon Dioxide emissions during its entire crediting period (28/03/2018 to 27/03/2023). The project has obtained requisite clearances and has already commissioned and was confirmed during remote audit.

The project activity is located in Kushtagi Wind Farm in Koppal district, Karnataka, India.

Technical Description:

The total installed capacity of the project is 21 MW, which involves operation of 10 Wind Turbine Generators (WTGs) of Suzlon S-97 model of 2.1 MW capacity each. Technical specifications of 21 MW Wind Energy Project in the state of Karnataka by Shree Cement Limited is as follows. These were confirmed based on submitted technical datasheets for the WTG model – S 97.

Technical Data of WTGs:

MODEL	S 97 – 2.1 MW
Operating Data	
Rated power	2.1 MW
Cut-in wind speed	4 m/s
Rated wind speed	11 m/s
Cut-out wind speed	25 m/s
Rotor	
Pitch system	Electric drive with electric brake, gear box, frequency converter and batteries
Diameter	97 m
Swept area	7386 m ²
Blade material type	Glass-fibre reinforced plastic (GRP)/Polyester
Generator	
Type	Asynchronous 3 phase induction with slip rings operated with rotor circuit inverter system (DFIG)
Frequency	50/60 Hz
Protection	IP 54, IP23 for slip ring unit
Cooling system	Air cooled
Insulation	Class H
Braking System	
Aerodynamic brake	Pitch/full blade
Mechanical brake	Hydraulic disc brake, activated by hydraulic pressure

Gearbox	
Type	3 stages (One planetary & Two helical)
Yaw System	
Type	Electric motors with brake, gear box and pinion
Bearings	3 (1 per blade) , Material - 42CrMo4 QT
Tower	
Type	Tubular Steel Tower (4 sections)

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 project's 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, audit team verified the implementation of the monitoring plan and the data presented in the monitoring report for the period in question. This involved interviewing PP representative during the remote interview and a desk review of the monitoring report and supporting documents. 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
Mr. Deepak Pundlik	LA/TE	YES	YES	NA	YES
Mr. Pankaj Kumar	A	YES	YES	NA	YES
Mr. Denny Xue	TR	YES	YES	NA	NA

The complete list of CVs is included as Appendix 03 of this report.

2.2 Document review

The Monitoring Report version 01 was submitted to VVB before the verification activity 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 and 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 section 4 of this report for detail of the documents checked.

2.3 On site assessment and follow up interviews

This project was design certified on 20/11/2019 with the 1st crediting period from 28/03/2018 to 27/03/2023. A remote audit was conducted as a part of design certification on 22/02/2019. As a part of performance certification for the period of 01/11/2019 to 31/12/2020 another on-site audit was conducted on 02/04/2021. As per GS4GG Site visit and Remote Audit Requirements and Procedures – V1.0, para 3.1.1 b mandates VVB to conduct on-site audit once every three years after the first physical site visit. This is 3rd periodic verification and since the last on-site audit was conducted on 02/04/2021, VVB conducted remote audit for the current assessment.

Details of interviewees, topics covered and additional information as a part of remote audit is presented below:

No	Interviewee			Date	Subject	Team Member
	Last name	First name	Affiliation			
1.	Ranjan	P. Pratap	Site-in-charge (Shree Cement limited)	18/05/2023	General aspects of the project, Quality management system, Monitoring data management, Data analysis, Implementation of the project, GHG emission reduction calculation, involved personnel and responsibilities, Training and practice of the operational personnel, Monitoring data management, Maintenance, Compliance to regulatory requirements, Environmental and social issues, Projects contribution to sustainable development	Mr. Deepak Pundlik & Mr. Pankaj Kumar
2	Kumar	Manoj	Site-in-charge (Shree Cement limited)			
3	Gupta	Umang	Energy and asset Management (Shree Cement limited)			
4	Tiwari	Shivangi	Management Trainee (Operations) EKI Energy Services Limited			
5	Mitra	Souvik	Manager – Operations (Climate Change) EKI Energy Services Limited			

The objective of the remote assessment was 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
- To understand grievance (if any) from the villagers during the monitoring period.

Local stakeholder meeting details:

Name of the stakeholder	Mr. Rahim Khan
Occupation	Shop-keeper
VVB 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. VVB also like to conclude that during the remote audit it was observed that local people were employed for security and operation related work like vegetation improvement and other unskilled work. VVB 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	Ms. Abhaya Patil
Occupation	Teacher
VVB questions: Did the power plant/WTGs 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 4.0. 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 and CRs 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: 02, CLs: 03, FARs: 00

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 VVB'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

No FARs envisaged from previous verification. This is 3rd periodic verification for the project activity.

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/01/. The assessment team confirms, through desk review and remote audit that all physical features of the project activity including data collection system and storage have been implemented in accordance with the validated PDD/02/.

The project activity was in normal operation during the current monitoring period and the same has been confirmed based on desk review of the remote interviews. No unusual activities observed during the current monitoring period and the project was undergone scheduled maintenance as per the recommendation of the manufacturer. No forced breakdown observed and the same is confirmed by the assessment team with the plant log details.

Project Developer	Shree Cement Limited
Title of project activity	21 MW Wind Energy Project by Shree Cement Limited
GS Registration No.	GS 6999

GS Version applied	The project has been submitted to GS4GG as per the guidelines of Gold Standard for Global Goals "Principles & Requirements" Version 1.2/10/ Hence the current verification of the project activity has followed the GS4GG version of the Gold Standard.
Baseline and monitoring methodology	ACM0002 Version 20.0 - Grid-connected electricity generation from renewable sources/09/
Project type	The purpose of the project activity is to generate electricity using wind power technology. It is a 21 MW large-scale grid connected wind energy power project.
Project scale	Large
Location of the project activity	The project located at Kustagi, District Koppal, Karnataka, India
Project's crediting period	28/03/2018 to 27/03/2023 (1 st Crediting Period)
Total duration of the project	25 years
Period verified in this verification	01/01/2021 to 27/03/2023 (inclusive of both dates)

Based on interview with PP representative the verification team was able to confirm that the project implementation is in accordance with the project description contained in the registered GS PDD/01/.

The project activity is a 21 MW large-scale grid connected Wind Energy project in District Kopal, Karnataka, India. The geo-coordinates of WTGs have been provided below in table and the same was confirmed referring to the website Google maps and found to be correct.

S.No	Location ID	Latitude	Longitude
1	KST 091	15°52'49.43"	76°12'00.23"
2	KST 092	15°52'58.59"	76°13'46.39"
3	KST 127	15°53'57.68"	76°13'12.72"
4	KST 129	15°53'15.44"	76°11'16.37"
5	KST 132	15°53'05.95"	76°12'01.57"
6	KST 133	15°53'34.38"	76°10'35.56"
7	KST 134	15°52'28.57"	76°12'12.61"
8	KST 145	15°53'05.62"	76°13'06.86"
9	KST 146	15°53'21.05"	76°13'40.58"
10	KST 179	15°52'49.83"	76°13'02.40"

The project activity involves installation and operation of 10 Wind Turbine Generators (WTGs) of 2.1 MW Suzlon S-97 model in the state of Karnataka. The cumulative capacity of the project activity is 21 MW.

The project has obtained the requisite clearances and has already commissioned on as verified from the review of relevant document /17/ and operating successfully /18/.

Sl. No.	WTG ID	Commissioning date
1	KST 091	28/03/2018
2	KST 129	28/03/2018
3	KST 134	28/03/2018
4	KST 145	31/03/2018
5	KST 146	31/03/2018
6	KST 127	31/03/2018
7	KST 179	31/03/2018
8	KST 132	28/06/2018
9	KST 133	28/06/2018
10	KST 092	28/06/2018

Project equipment and the technology are employed as mentioned in the registered PDD /01/.

The technical details of the project activity as confirmed during the interview. Project description as explained in section 1.3 above.

The monitoring data is recorded on continuous basis and available on hourly/daily basis as ERP and MIS reports /18/ and stored at plant site.

Training has been provided to the operators on the technology and the monitoring of the plant operation, and the emergency and safety procedures. The company has recruited personnel with relevant experience in the operation of the plant.

There is no event or situation including emergency situations occurred during this monitoring period which has impacted the applicability of methodology /09/. The outage record or breakdown report /13/ for this monitoring period was discussed during the remote audit and verified from logbooks shared by PP and found correct.

The timeline of the project's implementation is as follows:

Milestone of the project activity	Timeline	Assessment by the verification team
Registration of the project activity under GS4GG Principles and Requirements version 1.2	20/11/2019	The end date of the review period "6 week registration review period under GS4GG version 1.2" i.e. 20/11/2019 has been considered as the registration date of the project activity and has been verified by the verification team from the review document
Crediting period		
1 st monitoring period	28/03/2018 to 31/10/2019	Verification team has verified same from the registered documents. Also, this monitoring period was within the first crediting period.
2 nd Monitoring period	01/11/2019 to 31/12/2020 (inclusive of both dates)	Verification team has verified same from the registered documents. Also, this monitoring period is within the first crediting period.

3 rd Monitoring Period	01/01/2021 to 27/03/2023 (inclusive of both dates)	Verification team has verified same from the registered documents. Also, this monitoring period is within the first crediting period.
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Assessment of actual emission reductions with the estimate emission reductions in PDD:

Estimated Reduction as per registered PDD	44,806 tCO ₂ e/year As per registered PDD version 4.0, emission reductions for 365 days are 44,806 tCO ₂ e and for the current monitoring period, total days are 816. Accordingly, estimated emission reductions for this MP are 100,169 tCO ₂ e. Please refer calculation in ER spread sheet.
Actual Emission Reduction for the monitoring period	87,687 tCO ₂ e
Is any increase of VERS occurred?	No
Reason for increase of VERS	NA

In summary, verification team confirms that actual emission reductions are lower than the estimated for the current monitoring period.

Verification team considers the project and monitoring description of the project contained in the Monitoring report to be complete and accurate. The Monitoring report complies with the relevant methodology, tools, forms and guidance which are in line with that available in the registered documents (including PDD) with Gold Standard guidelines.

Opinion:

- In opinion of the assessment team the implementation and operation of the project activity is in compliance with the description in the PDD V.04.
- There is no revision in monitoring plan or post registration change for the current monitoring period.
- The actual emission reductions for the current monitoring period are 87,687 tCO₂e which are lower than the estimated ERs (100,169 tCO₂e) for the comparable period.

3.3 Compliance of the Monitoring Plan with the Monitoring Methodology

The verification team confirmed that the monitoring plan contained in the registered PDD and current monitoring report is in accordance with the approved methodology applied by the project activity — ACM0002, version 20.0 /09/.

The monitoring plan and the monitoring system implemented is in compliance to the applied monitoring methodology ACM0002, version 20.0. All other requirements of the applied

methodology are met. Furthermore, it can be confirmed that the ex-ante value for grid emission factor (EF) sourced from CEA database, version 14.0 from Government of India in the registered PDD has been correctly applied in the calculation of emission reductions. The verification team confirms that the monitoring plan of the GS project activity complied with the applied methodology.

During the verification, all the relevant monitoring parameters (as listed in the PDD/MR) have been verified with regard to the appropriateness of the applied measurement/determination method, the correctness of the values applied for ER calculation, the accuracy, and applied QA/QC measures.

Opinion:

The monitoring plan mentioned in the registered PDD is in line with the applied methodology i.e. ACM0002, version 20.0/09/. The monitoring mechanism is in line with the methodology and is effective and reliable.

3.4 Completeness of Monitoring

The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD/01/. During the course of verification, all relevant monitoring parameters have been verified with regard to the appropriateness of the applied measurement / determination method and applied QA/QC procedures. It is confirmed that the monitoring parameters have been measured / determined without material misstatements.

The electricity generation by the project activity is cross checked against the B-forms which are provided by Gulbarga Electricity Supply Company Limited. These B forms provide values for electricity export, import and % line losses incurred (transmission losses). These values are provided in the submitted ER sheet and same were checked and confirmed for the complete monitoring period.

The verification team reviewed the actual monitoring during the remote interviews and from document review, compared it against the requirements of the monitoring plan in the PDD/01/ and found in line.

The verification team assessed the monitoring techniques and each monitoring value in the monitoring report; and provided a short summary on the verification of every parameter listed in the monitoring plan and used for calculation of emission reductions.

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

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

The value for $EF_{grid,OM,y}$, $EF_{grid,BM,y}$ & $EF_{grid,CM,y}$ was considered from CO₂ Baseline Database Version 14.0 for the Indian Power Sector prepared by Central Electricity Authority, Government of India. The value of grid emission factor 0.9368 tCO₂/MWh is mentioned as per the registered

PDD. The 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 calculations are 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_{grid,OM,y} Relevant SDG Indicator= SDG13: Climate Action= 0.9610 tCO₂e/MWh

EF_{grid,BM,y} Relevant SDG Indicator= SDG13: Climate Action= 0.8644 tCO₂e/MWh

EF_{grid,CM,y} Relevant SDG Indicator= SDG13: Climate Action= 0.9368 tCO₂e/MWh

b. Data and parameters monitored

Relevant SDG Indicator	7.2.1 Renewable energy share in the total final energy consumption	
Data/parameter:	EG _{PJ,y}	
Unit	MWh	
Description	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh	
Measured/calculated/default	Calculated (based on the measured values of electricity exported and imported)	
Source of data	Monthly joint meter reading reports/B-Forms	
Value(s) of monitored parameter	Monitoring Period	Values
	01/01/2021 to 31/12/2021	44,678.97
	01/01/2022 to 31/12/2022	40,749.63
	01/01/2023 to 27/03/2023	8,175.02
	Total	93,603.62
Monitoring equipment	Monitoring equipment: ABT Energy Meters Accuracy of Energy meters: 0.2 The detailed schedule of Calibration and energy meters used in project activity has been mentioned in Appendix 2	
Measuring/reading/recording frequency:	Continuous measurement and at least monthly recording	
Calculation method (if applicable):	Net Electricity is calculated difference between export & import which is measured by energy meters.	
QA/QC procedures:	The electricity exported & imported is measured by Energy meters installed at substations. The reading is recorded and the difference from last month reading gives the number of units imported/exported. Net electricity supplied to the grid by the project plant in a given month = Export, kWh –Import, kWh. The 115% of import and transmission loss would be accounted while calculating net electricity supplied to grid as per PPA as confirmed by VVB.	

	The meters are approved, tested & sealed by the State Utility. The meters are in the custody of state Utility. The frequency of calibration is once in 5 years as per the registered PDD. The monthly electricity supplied/exported by the project activity is checked based on the form B. In the absence or delay in the meter calibration, appropriate guidelines are applied appropriately to confirm the conservativeness of metering.
Cross Checks	The value of net electricity generated was cross checked against the submitted electricity bills and the monthly values were found appropriate.

Relevant SDG Indicator	SDG 13.2.1: Climate Action	
Data/parameter:	ER _y	
Unit	tCO ₂	
Description	Emission reductions achieved per year	
Source of data checked by the assessment team	Emission reduction sheet	
Value(s) of monitored parameter	Monitoring Period	Values
	01/11/2021 to 31/12/2021	41,855
	01/01/2022 to 31/12/2022	38,174
	01/01/2023 to 27/03/2023	7,658
	Total	87,687
Means of verification:	The value of emission reductions is calculated based on measured electricity generation and grid emission factor. Electricity generation is based on form B and grid emission factor is calculated ex-ante.	
Cross check mechanism	All the formulas are applied in line with the registered GS4GG PDD	

Relevant SDG Indicator	SDG 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	
Data/parameter:	Quantitative employment	
Unit	Number	
Description	Number of people employed directly due to the project activity	
Measured/calculated/default	Not Applicable	
Source of data	Plant records or training records for all the employees/Letter from O&M contractor for employment generation VVB interview with employees, local stakeholders etc.	
Value(s) of monitored parameter	Total number of persons employed during this monitoring period provided by the PP was cross checked with plant records and through interviews.	

	Number of employment opportunities provided in the current monitoring period: <table><tr><th>Year</th><th>Skilled</th><th>Unskilled</th><th>Male</th><th>Female</th><th>Total</th></tr><tr><td>2021</td><td>36</td><td>Nil</td><td>36</td><td>0</td><td>36</td></tr><tr><td>2022</td><td>34</td><td>Nil</td><td>34</td><td>0</td><td>34</td></tr><tr><td>2023</td><td>14</td><td>Nil</td><td>14</td><td>0</td><td>14</td></tr></table> Further, the same has been crosschecked by the VVB during the remote audit by means of attendance register, interviews and salary slips.	Year	Skilled	Unskilled	Male	Female	Total	2021	36	Nil	36	0	36	2022	34	Nil	34	0	34	2023	14	Nil	14	0	14
Year	Skilled	Unskilled	Male	Female	Total																				
2021	36	Nil	36	0	36																				
2022	34	Nil	34	0	34																				
2023	14	Nil	14	0	14																				
Monitoring equipment	-																								
Measuring/reading/recording frequency:	Monthly monitoring and annual compilation																								
Calculation method (if applicable):	The total number of persons working at the project site is recorded based on the daily log available at site.																								
QA/QC procedures:	The number of persons employed is mentioned in the plant register is crossed checked with attendance register/16/. The information required for this parameter is being checked by VVB during remote audit through interview with people and through relevant supporting documents.																								
Cross Checks:	Employment records																								

Relevant SDG Indicator	8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training																		
Data/parameter:	Quality of employment																		
Unit	Number of trainings provided to employees																		
Description	Training of staff																		
Measured/calculated/default	Not applicable																		
Source of data	Plant records or training records/15/ for all the employees/Letter from O&M contractor for employment generation VVB interview with employees, local stakeholders etc.																		
Value(s) of monitored parameter	PP has confirmed that a total 07 trainings were conducted during this monitoring period.																		
	2021: 03																		
	2022: 03																		
	2023: 01																		
	HSE training																		
	<table><tr><td>Date (from)</td><td>Date (to)</td><td>Topic</td><td>No. of participants</td></tr><tr><td>13/12/2021</td><td>13/12/2021</td><td>HSE training</td><td>15</td></tr><tr><td>Year 2022</td><td colspan="3">No HSE trainings conducted</td></tr><tr><td>08/02/2023</td><td>08/02/2023</td><td>HSE training</td><td>21</td></tr></table>				Date (from)	Date (to)	Topic	No. of participants	13/12/2021	13/12/2021	HSE training	15	Year 2022	No HSE trainings conducted			08/02/2023	08/02/2023	HSE training
Date (from)	Date (to)	Topic	No. of participants																
13/12/2021	13/12/2021	HSE training	15																
Year 2022	No HSE trainings conducted																		
08/02/2023	08/02/2023	HSE training	21																

Technical Training				
Sr No.	Date (from)	Date (to)	Topic	No. of participants
1.	23/08/2021	27/08/2021	Wind Turbine S111_HH140 Components, Wind resource planning, WTG Safety, Micro siting, Forecasting and scheduling	4
2.	29/08/2021	01/09/2021	WTG site training including switchyard	4
3.	22/08/2022	27/08/2022	Wind Turbine S111_HH140 Components, Wind resource planning, WTG Safety, Micro siting, Forecasting and scheduling	5
4.	29/08/2022	02/09/2022	WTG site training including switchyard	5
5.	29/09/2022	01/10/2022	Wind turbine WRD113 & Switchyard	3
VVB confirmed the details provided in MR with the copy of training register/15/, the attendance sheet and cross checked by conducting interviews.				

Monitoring equipment	Not applicable
Measuring/reading/recording frequency:	Annually
Calculation method (if applicable):	-
QA/QC procedures:	The data crosschecked annually with the HSE & HR records by the consultant. VVB checked the training records maintained at plant site during the remote audit by VVB and confirmed the details are on line with the details provided in MR.
Cross Checks:	Training records.

The verification team confirms;

- The monitoring plan implemented is in line with monitoring plan included in approved GS4GG PDD.
- The monitoring complies with the requirement of the applied methodology.
- The information inflow (from data generation, aggregation, to recording, calculation and reporting) is included above under each parameter and confirms to the requirement of the approved PDD.
- The values included in the monitoring report and corresponding emission reduction sheets are verified, cross checked and included under each monitoring parameter, wherever appropriate.
- The findings relevant to each parameter, wherever appropriate are discussed in detail in Appendix 1 of this report.

In summary, the verification team confirms that all the ex-post parameters are monitored in accordance with the approved monitoring plan and applied methodology.

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 form B issued by State electricity board 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 which was shared by PP and checked by verification team and found the details in line with approved PDD. The Calibration details are presented in Appendix 2 of this report.

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 applicable norms and the meters are within the permissible error limit.

3.5 SDG Outcomes Monitoring

For Contributions to Sustainable Development

The verification team checked the sustainable development indicator parameters during the remote audit and interviews.

In Summary, it is VVB's opinion that the monitoring of the project with respect to sustainability is in line with requirement of the GS4GG guidelines.

As per the sustainability monitoring plan in the approved PDD, verification team evaluated all sustainable development indicators as followed in the table:

Item	Baseline estimate	Project estimate	Net benefit
SDG 7: Affordable and Clean Energy	-	93,603.62 MWh	93,603.62 MWh
SDG 8: Decent Work and Economic Growth	-	No. of employment opportunities created: 84 No. of trainings given: 07	No. of employment opportunities created: 84 No. of trainings given: 07
SDG 13: Climate Action	87,687 tCO ₂ e	-	87,687 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	106,927 MWh electricity generation	93,603.62 MWh electricity generation
SDG 8: Decent Work and Economic Growth	No. of employment opportunities created: 10 No. of trainings given: 01	No. of employment opportunities created: 84 No. of trainings given: 07
SDG 13: Climate Action	100,169 tCO ₂ e emission reductions	87,687 tCO ₂ e emission reductions

The adequacy and compliance of the monitoring plan in the monitoring report was found as per the requirements laid by the approved GS4GG PDD. The information flow (from data generation, aggregation, to recording, calculation and reporting) is already included under respective parameter above. The verification team has verified all the data and collected evidence as per the required monitoring frequency and found to be correct and appropriate meeting the requirements of the applied methodology and registered PDD.

As a part of continuous feedback from stakeholders, the grievances register is being placed at site and is being continuously monitored and addressed through the grievances cell on regular basis. The grievance register provided to verification team was also checked and it was noted that during the current monitoring period, no comments/feedbacks were received from the local stakeholders.

Assessment team also checked the Indian domestic REC web site (<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. VVB also verified with an undertaking provided by PP confirming that there will be no double counting of emission reductions for the current MP.

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

Sections	Debriefing
Trainings & salaries of the employees	During remote interview, Mr. Sanjay Singh, PP representative team was interviewed. It was noted that regular technical & non-technical trainings were conducted and the salaries are in line with the industry standard.

In Summary, VVB noted that the monitoring of the project regarding to sustainability is in line with requirement of the GS4GG guidelines.

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 final version of MR and corresponding ER calculation spreadsheet. VVB confirmed that they are consistent with the applied methodology ACM0002 version 20.0 and the monitoring plan contained in the registered PDD.

After verifying the reported figures with the raw data sources, it is confirmed that the values of the parameters from the raw data sources are consistent with those quoted in the final version of MR and corresponding ER calculation spreadsheet. The verification process for the same has been clearly described above. VVB has checked and the assessment of date is presented below:

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

Calculation of baseline emission is as follows;

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

Where,

BE_y = Baseline emissions in year y (tCO_2/yr)

$EG_{PJ,y}$ = Net Quantity of net electricity supplied to 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 in year y i.e. 0.9368 tCO₂/MWh (fixed ex-ante as per CEA Database Version 14.0)

As per para 41 of ACM0002, Version 20.0, when the project activity is installation of Greenfield power plant, then:

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

Where,

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

$$= 93,603.62 \times 0.9368$$

$$= 87,687 \text{ tCO}_2\text{e (Rounded down).}$$

The vintage wise baseline emissions are as below which were confirmed based on the submitted evidences (B forms, calibration certificates etc.) and equations as per registered GS PDD.

Year	Net Electricity Export(MWh)	Baseline Emission Factor(tCO ₂ /MWh)	Baseline Emissions (tCO ₂ e)
2021	44,678.97	0.9368	41,855
2022	40,749.63	0.9368	38,174
2023	8,175.02	0.9368	7,658
Total	93,603.62	-	87,687

Project emissions:

Project Emissions, $PE_y = 0$ as para 31 of the applied methodology

Emission reductions:

AS per para 54 of applied methodology

$$ER_y = BE_y - PE_y$$

$$ER_y = 87,687 - 0$$

Hence, $ER_y = 87,687 \text{ tCO}_2\text{e}$.

The vintage wise emission reductions are as below which were confirmed based on the submitted evidences (B forms, calibration certificates etc.) and equations as per registered GS PDD.

Year	Baseline Emissions(tCO ₂ e)	Project emissions (tCO ₂ e)	Emission reductions (tCO ₂ e)
2021	41,855	0	41,855
2022	38,174	0	38,174
2023	7,658	0	7,658

Total	87,687	0	87,687
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3.7 Management and Operational System

The responsibilities of data measurement, collection, verifying, archiving etc. have been clearly defined in the registered PDD. The same practice is followed onsite and it is confirmed by the assessment team during the verification. 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.

The monitoring personnel have been interviewed by the assessment team and it's confirmed that the monitoring is implemented as per the procedure in the registered PDD. Also, the training record comprising of training register and attendance sheet has been checked by the assessment team and it is confirmed that the monitoring personnel are get sufficient trainings to perform the tasks.

VVB confirmed that PP has ensured, all the data and documents, either hard copies or soft copies, will be 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
/01/	Registered PDD version 04 dated 06/12/2019
/02/	Validation Report for the PDD version 02 dated 06/12/2019
/03/	Monitoring report version 02 dated 23/04/2020 (1 st periodic verification)
/04/	Verification report version 01 dated 06/06/2020 (1 st periodic verification)
/05/	Monitoring report version 02 dated 19/04/2021 (2 nd periodic verification)
/06/	Verification report version 01 dated 13/05/2021 (2 nd periodic verification)
/07/	Initial MR, version 01 dated 17/04/2023 (3 rd periodic verification) Final MR, MR version 07 dated 12/03/20234
/08/	Initial emission reduction sheet, version 01 dated 17/04/2023 (3 rd periodic verification) Final emission reduction sheet, version 05 dated 12/03/2024
/09/	Approved CDM methodology ACM0002, version 20.0 CDM Validation and Verification standard for project activities, version 3.0 GS4GG Validation and Verification Standard, version 1.0
/10/	Gold Standard for Global Goals "Principles and Requirement", version 1.2
/11/	Form B to confirm electricity generation
/12/	Actual geo-coordinates
/13/	Break Down details of WTGs
/14/	Calibration certificates for energy meters
/15/	Training records
/16/	Employment records
/17/	Commissioning certificates for WTGs
/18/	Log book records for scheduled maintenance for the complete monitoring period
/19/	Grievance register
/20/	CSR records
/21/	EHS Policy

5. VERIFICATION STATEMENT

Applus+ Certification has been engaged by Shree Cement Limited to perform the 3rd periodical verification of the “21 MW Wind Energy Project by Shree Cement Limited”.

The management of Shree Cement 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. The verification can confirm that:

- the project is operated as planned and described in the approved GS4GG project design document;
- 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 GS4GG;
- 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 “21 MW Wind Energy Project by Shree Cement Limited” for the monitoring period 01/01/2021 to 27/03/2023 (inclusive of both dates) 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: 01/01/2021 to 27/03/2023 (inclusive of both dates)

Verified emissions in the above reporting period:

Leakage emissions	0 tCO ₂ e equivalents
Project emissions	0 tCO ₂ e equivalents
Baseline emissions	87,687 tCO ₂ e equivalents
Emission reductions	87,687 tCO ₂ e equivalents

Date: 12/03/2024

Lead Auditor & Tech. Expert: Mr. Deepak Pundlik
Auditor: Mr. Pankaj Kumar
Tech. Reviewer: Mr. Denny Xue

Approver (*Applus+ Certification VVB Technical Manager*)
 Mr. Agustín Calle de Miguel

ASSESSMENT TEAM	
Team Leader Mr. Deepak Pundlik	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:		Ref. to checklist in above tables:	3.2
Description of the audit finding	Date: 31/05/2023		
To confirm project description and implementation, following documents to be submitted: 1. Joint Meter Readings and invoices 2. Grievance register 3. Shutdown and breakdown details 4. Meter calibration certificate 5. Employment records 6. Training records			
Project Participant's response		Date:	09/06/2023
1. Joint Meter Readings (Form-Bs) and invoices (monthly statements for electricity generation) for the current monitoring period provided 2. -Grievance register provided 3. Plant shutdown details provided 4. Submitting herewith, the meter calibration certificates covering the current monitoring period. 5. Submitting herewith, the employment records of the employees in the project activity. 6. Submitting herewith, the training records of the employees in the project activity.			
Documentation provided as evidence by Project Participant			
1. Form Bs and Monthly Generation Data 2. Grievance register provided 3. Plant shutdown details 4. Calibration Certificates 5. Employment Records 6. Training Records			
Auditor's assessment comment		Date:	21/06/2023
1. PP has submitted JMRs. However, some documents were not found among the submitted document: I. JMR of month January 2021, March 2022 and September 2022. Also, PP to provide Specific DGR for March 2023. II. Invoices of current monitoring period Hence, this part of CL is open. 2. Grievance register was not found among the submitted document. Hence, this part of CL is open. 3. Shutdown and breakdown report was not found among the submitted documents. Hence, this part of CL is open. 4. PP has submitted Meter calibration certificate. However, in the revised MR version 02.0 dated 09/06/2023 in appendix 01 '<i>Meter details</i>' PP to mention calibration date corresponding to the relevant meters. Also, date of changed meter 'Sr. No. 21003390' is not in line with the supporting docs. Hence, this part of CL is open. 5. Employment records were not found among the submitted documents. Hence, this part of CL is open. 6. PP has submitted Training records of the employees for the current monitoring period. Hence, this part of CL is closed. CL is open			
Project Participant's response		Date:	27/06/2023

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	01
Raised by:		Ref. to checklist in above tables:	3.2
1. I. Form-B of January 2021, March 2022 and September 2022 provided; DGR of March 2023 provided II. Monthly statement of electricity generation provided to cross-check the values. As the electricity is being consumed in-house, there is no separate invoice, these monthly statements are used as cross-check 2. Grievance register (sample) provided to verification team 3. Plant shutdown details in this monitoring period provided to verification team 4. Appendix 1 in MR revised for meter calibration details ; date of calibration for Sr. No. 21003390' revised as per calibration certificate 5. Employment records in this monitoring period have been provided to verification team			
Documentation provided as evidence by Project Participant			
1. Form B of the months -January 2021, March 2022 and September 2022 2. DGR of March 2023 3. Grievance register (sample) 4. MR v03 5. Employment records 6. Plant shutdown details (in spreadsheet)			
Auditor's assessment comment		Date:	30/06/2023
1. It was checked and confirmed that I. PP has submitted JMR of January 2021, March 2022 and September 2022. Also, PP has provided the specific JMR of March 2023. Hence, this part of CL is closed. II. PP has submitted wheeling agreement dated 05/07/2018 which confirms that the generated electricity is consumed in house by the PP. This confirms that invoices copies will be not available. However, PP shall provide evidence of energy consumption adjustment carried out against the generated renewable electricity at the drawal point. Hence this part of CL is open. 2. It was checked and confirmed that PP has submitted the copy of grievance register that was maintained at the project site. Hence, this part of CL is closed 3. It was checked and observed that PP has provided the breakdown details for this current monitoring period. However, stop date of first breakdown is not consistent with the date mentioned in the appendix 02 of the submitted MR version 03. Hence, this part of CL is open. 4. It was checked and confirmed that PP has revised the calibration details which is mentioned in the appendix 01 of the revised MR version 03. Hence, this part of CL is closed. 5. It was checked and confirmed that PP has provided the Employment record for this project activity. Hence, this part of CL is closed.			
CL is open			
Project Participant's response		Date:	27/07/2023

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	01
Raised by:		Ref. to checklist in above tables:	3.2
1. Electricity generated in the plant is used for in-house consumption. The adjustment for generation and consumption are done through the equation mentioned in Article 6.2 in banking and wheeling agreement $E_{bi} = [E_g \cdot (1 - B - C)] + E_{b(i-1)} - E_t$ Where, E_{bi} = Banked energy at the end of a month including previous month banked energy carried forward during the corresponding ToD time block. $E_{b(i-1)}$ = Banked energy as at the end of the previous month during the corresponding ToD time block E_g = Generated energy injected to the grid at the point of injection in a month as recorded by the export register of the meter during the corresponding ToD time block, less 115% of energy recorded by import meter during the corresponding ToD time block. B = Banking charges in kind expressed in percentage C = Transmission and/or wheeling charges expressed in percentage. E_t = Actual energy Consumed in a month during the corresponding ToD time block by the Exclusive Consumers and/or Non-Exclusive Consumer and/or captive consumers. Electricity bill for consumption (combined for this project and another 8 MW wind project of the same project developer) also provided. 3. There was a typo error in the breakdown details stop date of first breakdown – it was typed 07/12/2021 instead of 07/02/2021; now it has been revised and it is consistent in both the records of breakdown (spreadsheet) and MR Appendix 2			
Documentation provided as evidence by Project Participant			
- Banking and wheeling agreement - Electricity bill - Revised MR (v04) - Breakdown details			
Auditor's assessment comment		Date:	01/08/2023
1. PP response is accepted. It was checked and confirmed that PP has submitted electricity bill and it was consistent with the JMRs. Hence, this part of CL is closed. 3. It was checked and confirmed that PP has revised the stop date of first break down breakdown. Hence, this part of CL is closed. CL 01 is closed			

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	02
Raised by:		Ref. to checklist in above tables:	1.3
Description of the audit finding		Date:	31/05/2023

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	02
Raised by:		Ref. to checklist in above tables:	1.3
1. In section A.1 of the submitted monitoring report version 1.0 dated 17/04/2023, PP mentioned table for the 'vintage wise emission reduction during the entire monitoring period'. However, the amount of ERs for concerned monitoring period is not consistent with the ER sheet and other sections of the monitoring report. Please clarify. 2. PP to provide the necessary document to verify the date of the last annual report.			
Project Participant's response		Date:	09/06/2023
1. The table describing the 'Vintage wise emission reduction during the entire monitoring period' is revised with that of the values from the ER Sheet. Also, the other sections describing the amount of ERs have been revised. 2. Alongside revising the date of the last annual report, the 'Project Annual Report Form' has also been attached for its verification.			
Documentation provided as evidence by Project Participant			
1. Revised Monitoring Report (Version 2, dated 09/06/2023) attached herewith. 2. Project Annual Report Form			
Auditor's assessment comment		Date:	21/06/2023
1. It was checked and confirmed that PP has revised the table of 'vintage wise emission reduction' for the current monitoring period in section A.1. Hence, this part of CL is closed. 2. It was checked and observed that 'Project annual report form' was not found among the submitted documents. Hence, this part of CL is open. CL is open			
Project Participant's response		Date:	27/06/2023
Project annual report form provided to verification team			
Documentation provided as evidence by Project Participant			
GS 6999 project annual report form dated 20/12/2022			
Auditor's assessment comment		Date:	30/06/2023
It was checked and confirmed that PP has submitted last project annual report for this project activity. Hence, this part of CAR is closed.			
CL 02 is closed			

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	03
Raised by:		Ref. to checklist in above tables:	3.4
Description of the audit finding		Date:	31/05/2023
1. The data/parameter EG_{p3,y} 'quantity of net electricity generation supplied by the project plant/unit to the grid' is included in section D.1 as fixed ex-ante parameter. However, as per the GS registered PDD version 4.0 it is not the part of fixed ex-ante parameter. PP to clarify. 2. In Section D.1 of the submitted MR version 1.0 for SDG 7, PP referred PPA to calculate net electricity supplied to grid. PP to submit Power purchase agreement.			
Project Participant's response		Date:	09/06/2023

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	03
Raised by:		Ref. to checklist in above tables:	3.4
- There is no parameter $EG_{PJ,y}$ in section D.1 neither in GS registered PDD nor in the Monitoring Report. This parameter is included in section D.2 of GS PDD as well as Monitoring Report. - There is no mention of SDG-7 or the reference of PPA to calculate net electricity supplied to grid in section D.1. This parameter is mentioned in section D.2 of GS PDD as well as Monitoring Report.			
Documentation provided as evidence by Project Participant			
Revised MR (Version 2, dated 09/06/2023).			
Auditor's assessment comment		Date:	21/06/2023
- Revised MR version 02 dated 09/06/2023 was checked and confirmed that PP has revised section D.1 accordingly. Hence, this part of CL is closed - In the submitted MR version 01 dated 17/04/2023 in section D.1 for SDG 07 PP had referred PPA. However, it was checked and confirmed that PP has revised the section and mentioned SDG-7 in section D.2 and referred 'Wheeling & Banking Agreement'. Also, PP has submitted the Wheeling and banking agreement. Hence, this part of CL is closed.			
CL 03 is closed			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	01
Raised by:		Ref. to checklist in above tables:	3.4
Description of the audit finding		Date:	31/05/2023
- As per the registered PDD version 4.0, PP has not mentioned the fixed ex-ante data/parameter $EF_{grid,CM,Y}$ in section D.1 of the monitoring report. Correction is sought. - For SDG 08 (indicator 8.5.1), in section D.2 of the monitoring report PP mentions "<i>Further the same has been crosschecked by the VVB during on remote audit by means of attendance register and physical interviews and Salary Slips</i>". PP to revise the statement. Corrective action required. - In section D.2 of the submitted monitoring report, for SDG 08, PP mentioned the table to show the 'breakup of employment generated during the monitoring period'. However, PP to mention the value as per the parameters of the table. Correction is required.			
Project Participant's response		Date:	09/06/2023
- The respective ex-ante data/parameter $EF_{grid,CM,Y}$ has been added in section D.1 of the monitoring report. - The concerned sentence has been revised in section D.2 of MR - The employment data has been updated in section D.2 for SDG 8.5.1 : Number of employment generation			
Documentation provided as evidence by Project Participant			
- Revised MR (Version 2, dated 09/06/2023). - Revised MR (Version 2, dated 09/06/2023). - Revised MR (Version 2, dated 09/06/2023) and Annexure 5- Employment Records			
Auditor's assessment comment		Date:	21/06/2023

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	01
Raised by:		Ref. to checklist in above tables:	3.4
1. It was checked and confirmed that in the revised PD version 2.0 dated 09/06/2023 PP has revised the section D.1 accordingly. Hence, this part of CAR is closed. 2. It was checked and confirmed that PP has made appropriate correction in section D.2 for the SDG 08. Hence, this part of CAR is closed. 3. The revised MR version 02 dated 09/06/2023 was checked and confirmed that PP has revised the table for SDG 08 (indicator 8.5.1) in section D.2. Hence, this part of CAR is closed.			
CAR 01 is closed			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	02
Raised by:		Ref. to checklist in above tables:	3.5
Description of the audit finding		Date:	31/05/2023
As per ER sheet the total days for this monitoring period is 816. However, ' 427 days ' is mentioned in section E.5.1 of the submitted monitoring report version 1.0. Correction is sought.			
Project Participant's response		Date:	09/06/2023
The respective sentence has been corrected.			
Documentation provided as evidence by Project Participant			
Revised MR (Version 2, dated 09/06/2023)			
Auditor's assessment comment		Date:	21/06/2023
It was checked and confirmed that PP has revised the sentence in section E.5.1 accordingly. Hence this CAR is closed.			
CAR 02 is closed			

Appendix 2: Calibration details of monitoring meters

Main Meter

Serial No.	18015377	21003390
Type	ETV	ETV
Make	L&T	L&T
Accuracy class	0.2s	0.2s
Period of operation during the monitoring period	01/01/2021 to 15/03/2022	15/03/2022 to 27/03/2023
Calibration date	23/02/2018	17/02/2022 and 16/12/2022
Valid till	22/02/2023	16/02/2027 and 15/12/2027

Main meter (Serial no. 18015377) has been replaced on 15/03/2022 as it was found faulty and replaced by new meter (serial no. 21003390).

During remote audit, VVB has checked and confirmed that existing meter calibration frequency for the energy meters is annual however, it is within the control of discom and not strictly followed which is also mentioned in the MR. Calibration of the old meter (Sr. No. 18015377) was due in February, 2022. However, Discom decided to conduct the calibration in March, 2022 and since the fault was identified which is mentioned below, the same was replaced.

Since, the main meter was found faulty, PD has considered generation data for the month of March, 2022 in 2 parts. i. as per check meter till 15/03/2022 and ii. As per main meter from 15/03/2022 till end of the month and onwards till end of monitoring period as the new main meter was in operation from 16/03/2022. This is found acceptable.

Check meter

Serial No.	18015378	
Type	ETV	
Make	L& T	
Accuracy class	0.2 s	
Period of operation during the monitoring period	01/01/2021 to 27/03/2023	
Calibration date	23/02/2018	20/01/2021
Valid till	22/02/2023	19/01/2026

Considering the dates of calibration of meters, it can be concluded that there has been no delay in calibration of meters.

Appendix 3: Audit Team CVs

Name	SHORT CV. BACKGROUND INFORMATION
Mr. Deepak Pundlik	Mr. Deepak Pundlik has 15 years of experience in climate change, waste management and environmental management. After completing Masters in Environment Sciences from Pune university, He has worked in waste management field. As a GHG consultant, He handled more than 50 projects under renewable energy, waste management sectors during his stint with companies - MITCON and Thermax. Post Thermax, Deepak was involved in organic farming research project with Tata Institute of Social Sciences. As a GHG auditor, He has validated/verified projects under CDM/VCS/GS and GCC mechanisms from renewable energy, energy demand, waste management sectors.
Mr. Pankaj kumar	Mr. Pankaj Kumar worked as team leader – Bihar for South Asia Climate Proofing and Growth Development (CPGD) – Climate Change Innovation Programme (CCIP) supported by DFID that seeks to mainstream climate change resilience into planning and budgeting at the national and sub-national level in India, Pakistan, Nepal, and Afghanistan. Pankaj Kumar has worked previously with IL&FS Infrastructure Development Corporation and BUIDCO (Bihar Urban Infrastructure Development Corporation), Govt. of Bihar as Environmental Specialist for WB & ADB funded projects. Prior to this, he worked with Carbon Check (UNFCCC accredited DoE), Johannesburg, RSA as Team Leader for validation, verification of around 100 GHG projects in Asia, Africa, USA, Asia Pacific & Americas. Pankaj is accredited Lead Auditor, Validator, Verifier and Technical Expert for Sectoral Scope/Technical Area – 1.1, 1.2, 3.1 & 13.1 by UNFCCC DoE (Designated Operational Entity), APPLUS, Spain. He is also member of task force on climate change & human health, Health Department, GoB and on roster of UNICEF's WASH experts. He is an experienced, qualified and result oriented Environment Professional having more than 14 yrs. Of relevant experience in Climate Change (Mitigation & Adaptation), Environmental Due Diligence, Disaster Risk Reduction, Validation and Verification of GHG project under CDM, Verified Carbon Standard, Gold Standard & Social Carbon Standard, Brazil. He provides technical support for environmental investigative, consultative and remedial projects involving air, water and soil, Waste management, EIA, Environmental Compliance, ISO 14001, OHSAS 18001, GHG accounting (ISO 14064) and Carbon foot printing. Pankaj Kumar is Masters in Environment Management from Forest Research Institute (University), I.C.F.R.E, Dehradun, which is Centre of Excellence in South East Asia for Forestry education & research and PGDEL from National Law School of India University, Bangalore (India).
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 participate in the project's technical review team.

Appendix 4: GS4GG 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	Remote audit, Conducting site interviews of project developer representative, Documents shared by PD during remote audit To review: - documentation/ documentary evidence(s)	Yes	No		CL 01 was raised and was successfully closed.	Positive	Monitoring Report and submitted documents
Location of project	Remote audit	Yes	No		N/A	Positive	Monitoring report and 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	Remote audit, Conducting site interviews of project developer representative, Documents shared by PD during remote audit To review: - documentation/ documentary evidence(s)	Yes	No		N/A	Positive	NA
Post-Design Certification changes	Document Review	Yes	No		N/A	Positive	NA
Description Of Monitoring System Applied by The Project	Remote audit, Conducting site interviews of project developer representative, Documents shared by PD during remote audit To review: - documentation/ documentary evidence(s)	Yes	no			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							

ER_y	Document Review	Yes	No		N/A	Positive	NA
EG _{PJ,y}	Document Review	Yes	No		CL 03 was raised and was successfully closed.		N/A
Number of employment generation	Document Review	Yes	No		N/A		N/A
Income Generation	Document Review	Yes	No		N/A		N/A
Number of trainings provided	Document Review	Yes	No				N/A
Comparison of monitored parameters with last monitoring period	NA	No	No		N/A	Positive	NA
Implementation of sampling plan	Not Applicable	No	No		N/A	Positive	NA
CALCULATION OF SDG IMPACTS							
Calculation of baseline value or estimation of baseline situation of each SDG Impact	Documents shared by PD during remote 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 project situation 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 remote audit To review: - documentation/ documentary evidence(s)	Yes	No		CL 02 was raised and was successfully closed.	Positive	

Comparison of actual SDG Impacts with estimates in approved PDD	Documents shared by PD during remote audit To review: - documentation/ documentary evidence(s)	Yes	No		CAR 01 was raised and was successfully closed.	Positive	SDG 8.5.1. No of peoples employed (Permanent employment numbers)
Explanation of calculation of value estimated ex ante calculation of approved PDD for this monitoring period	Documents shared by PD during remote audit To review: - documentation/ documentary evidence(s)	Yes	No		CAR 02 was raised and was successfully closed.	Positive	Calculation of clean energy in terms of tCO ₂ emissions reduced.
Remarks on increase in achieved SDG Impacts from estimated value in approved PDD	Documents shared by PD during remote audit To review: - documentation/ documentary evidence(s)	Yes	No		N/A	Positive	N/A
Safeguards Reporting	Documents shared by PD during remote 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 Remote audit To review: - documentation/ documentary evidence(s)	Yes	No		N/A	Positive	Grievance log sheet 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 Remote audit To review: - documentation/ documentary evidence(s)	Yes	No		N/A	Positive	PP is monitoring the parameters as per the GS PDD and no deviation
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 Remote audit To review: - documentation/ documentary evidence(s)	Yes	No		N/A	Positive	No, the project already obtained statutory clearances

Appendix 5: Safeguarding principle assessment

SOCIAL SAFEGUARDING PRINCIPLES			
Reference requirement	Question	PD Response	VVB assessment
P.1 Human Rights			
P.1.1.1	Does the project developer, its representatives and the Project disrespect internationally proclaimed human rights?	☐ YES	The project fulfils the requirement of Gold standard certification and is neither in conflict with the economic livelihood, local community nor violating any human rights, Hence there is no requirement of any mitigation measures in the project. The audit team confirms that Project activity fulfils the GS certification requirement outlined in the P.1 of the GS4GG safeguarding principles requirements version 2.1
-		☒ NO	
P.1.1.1	Is the project involved or complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights?	☐ YES	
-		☒ NO	
P.1.1.2	Have local communities or individuals raised human rights concerns regarding the project (e.g., during the stakeholder engagement process, grievance processes, public statements)?	☐ YES	
-		☒ NO	
P.1.1.3	Is there a risk that rights-holders (e.g., Project-affected stakeholders) do not have the capacity to claim their rights?	☐ YES	
-		☒ NO	
P.1.1.3	Does this project undermine national or regional measures for the realisation of the right to development?	☐ YES	
-		☒ NO	
P.1.1.1	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalised groups?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
P.1.1.2	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalised or excluded individuals or groups, including persons with disabilities?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
P.1.1.3	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalised individuals or groups, including persons with disabilities?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
P.1.1.3	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
P.2 Gender Equality and Women’s Empowerment			
P.2.1.1	Have women’s groups/leaders raised gender equality concerns regarding the project, (e.g., during the stakeholder engagement process, grievance processes, public statements)?	☐ YES	The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the
-		☒ NO	
-			
P.2.1.2	☒ YES		
-	☐ NO		

-	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?		audit team during the remote audit and interviews.
<u>P.2.1.2 </u>	Does the project prevent men and women from having equal opportunities to participate in identified tasks and activities, whether through paid work, volunteer work, or community contributions, as appropriate?	☐ YES	
-		☒ NO	
-			
<u>P.2.1.2 </u>	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	☐ YES	
-		☒ NO	
<u>P.2.1.2 </u>	Is information about project objectives being communicated in a way that is inappropriate for the local context and not tailored to the methods of understanding of both women and men, which could hinder their participation?	☐ YES	
-		☒ NO	
<u>P.2.1.3 </u>	Has the project assessed gender risks without referencing the country's gender strategy or equivalent national commitment?	☐ YES	
-		☒ NO	
<u>P.2.1.4 </u>	Has expert stakeholder(s) been involved, and has their input been requested for the project design on gender equality and women's empowerment?	☐ YES	
-		☒ NO	
If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.			
<i>PP will ensure that the project undermines the principles of non-discrimination, equal treatment, and equal pay for equal work. VVB noted during remote audit that PP will ensure equal treatment and equal pay for equal work for both men and women.</i>			
Would the project potentially involve or lead to:			
<u>P.2.1.1 </u>	adverse impacts on gender equality and/or the situation of women and girls?	☐ YES	The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interviews.
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.2.1.1 </u>	exacerbation of risks of gender-based violence? For example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.2.1.2 </u>	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.2.1.2 </u>	limitations on women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well-being.	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
Briefly describe below how the project is addressing any identified risk to gender equality and women's empowerment.			
NA			

P.3 Community Health AND Safety			
<u>P.3.1.1 </u>	Does the project involve potential risks to the health and safety of affected communities during its life cycle?	☐ YES	PP confirmed that all the employees will be trained about health and safety issues during operation phase of the project. Requirement outlined in the GS4GG safeguarding principles requirements version 2.1
-		☒ NO	
<u>P.3.1.2 </u>	Does the project involve any potential risks to the workers' safety and health?	☐ YES	
-		☒ NO	
If the answer to any of the questions above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.			
NA			
Would the project potentially involve or lead to:			
<u>P.3.1.1 </u>	construction and/or infrastructure development (e.g., roads, buildings, dams)?	☐ YES	
-		☒ NO	
<u>P.3.1.2 </u>	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.3.1.2 </u>	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.3.1.2 </u>	risks of water-borne or other vector-borne diseases (e.g., temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.3.1.2 </u>	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g., explosives, fuel and other chemicals during construction and operation)?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.3.1.2 </u>	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g., food, surface water purification, natural buffers from flooding)?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
Briefly describe below how the project is addressing any identified risk related to community health and safety.			
NA			

<u>P.4 Cultural Heritage, Indigenous People, Displacement and Resettlement</u>	-	-	
<u>P.4.1 Sites of Cultural and Historical Heritage</u>	-	-	
<u>P.4.1.1 </u>	Does the project involve altering, damaging, or removing sites, objects, or structures of significant cultural heritage?	☐ YES ☒ NO	The PA does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-			
If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.			
<u>NA</u>			
Would the project potentially involve or lead to:			
<u>P.4.1.1 </u>	activities adjacent to or within a cultural heritage site?	☐ YES ☐ POTENTIALLY ☒ NO	
-			
-			
<u>P.4.1.1 </u>	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	☐ YES ☐ POTENTIALLY ☒ NO	
-			
-			
<u>P.4.1.1 </u>	alterations to landscapes and natural features with cultural significance?	☐ YES ☐ POTENTIALLY ☒ NO	
-			
-			
<u>P.4.1.1 </u>	adverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g., knowledge, innovations, practices)? (Note: projects intended to protect and conserve Cultural Heritage may also have inadvertent adverse impacts)	☐ YES ☐ POTENTIALLY ☒ NO	
-			
-			
<u>P.4.1.2 </u>	utilisation of tangible and/or intangible forms (e.g., practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?	☐ YES ☐ POTENTIALLY ☒ NO	
-			
-			
<u>P.4.1.2 </u>	If answer to question above is "YES" or "POTENTIALLY" - are the communities made	☐ YES ☒ NO	
-			

-	aware of their right under the law, scope and nature of proposed development and its potential consequences?	☐ NA	
<u>P.4.1.3</u>	If answer to question above is "YES" - does the project provide equitable sharing of benefits from commercialisation of such knowledge, innovation, or practice, consistent with their customs and traditions?	☐ YES	
-		☒ NO	
-		☐ NA	
<u>P.4.1.4</u>	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES	
-		☒ NO	
-		☐ NA	
<u>P.4.1.4</u>	If answer to question above is "YES", has project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES	
-		☒ NO	
-		☐ NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.4.2</u> <i>Forced Eviction and Displacement</i>	-	-	
<u>P.4.2.1</u>	Does the project involve any risks related to involuntary relocation of people?	☐ YES	
-		☒ NO	
If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.			The PA does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
NA			
Would the project potentially involve or lead to:			
<u>P.4.2.1</u>		☐ YES	
-	risk of forced evictions or involuntary relocation of people?	☐ POTENTIALLY	
-		☒ NO	

<u>P.4.2.2 </u>	temporary or permanent and full or partial physical displacement (including people without legally recognisable claims to land)?	☐ YES	The PA does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.4.2.2 </u>	economic displacement (e.g., loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.4.2.2 </u>	If answer to question above is "YES" or "POTENTIALLY", - has the project developed Resettlement Action Plan or Livelihood Action Plan in consultation and agreement with affected individual, group or community? - has the project integrated Resettlement Action Plan or Livelihood Action Plan into the Project design?	☐ YES	
-		☒ NO	
-		☐ NA	
<u>P.4.2.3 </u>	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES	
-		☒ NO	
-		☐ NA	
<u>P.4.2.3 </u>	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES	
-		☒ NO	
-		☐ NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.4.3 Land tenure and other rights</u>	-	-	
<u>P.4.3.1 </u>	Does the project involve any risks related to identifying and managing legitimate tenure rights that may be affected by the project?	☐ YES	
-		☒ NO	
If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.			
NA			
Would the project potentially involve or lead to:			
<u>P.4.3.1 </u>	impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.4.3.1 </u>	uncertainties with regards to land tenure, access rights, usage rights or land	☐ YES	

-	ownership? Examples include, but are not limited to water access rights, community-based property rights and customary rights.	☐ POTENTIALLY	
-		☒ NO	
<u>P.4.3.2 </u>	Changes in legal arrangements, if yes, are the changes done in line with relevant laws and regulations?	☐ YES	
-		☒ NO	
-		☐ NA	
<u>P.4.3.2 </u>	Changes in legal arrangements, if yes, are these changes agree with free, prior and informed consent of the involved stakeholders?	☐ YES	
-		☒ NO	
-		☐ NA	
<u>P.4.3.3 </u>	Does some other entity (other than the project developer) hold uncontested land title for the entire Project Boundary?	☐ YES	
-		☒ NO	
-		☐ NA	
<u>P.4.3.4 </u>	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES	
-		☒ NO	
-		☐ NA	
<u>P.4.3.4 </u>	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES	
-		☒ NO	
-		☐ NA	
<u>P.4.3.5 </u>	Have project developer in consultation with stakeholders established a functioning mechanism to receive, process, resolve, communicate and record grievances?	☐ YES	
-		☒ NO	
-		☐ NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
<i>NA</i>			
<u>P.4.4 Indigenous peoples</u>	-	-	
<u>P.4.4.1 </u>	Does the project involve Indigenous People within the Project area of influence who may be affected directly or indirectly by the Project?	☐ YES	The PA does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☒ NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
<i>NA</i>			

Would the project potentially involve or lead to:			
<u>P.4.4.1 </u>	affect areas where indigenous peoples are present (including project area of influence)	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.4.4.1 </u>	affect areas, land and territory claimed by indigenous peoples?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.4.4.1 </u>	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.4.4.7 </u>	If answer to above questions is "YES" or "POTENTIALLY",	☐ YES	
-	- Is it determined that the proposed project may affect the rights, lands, resources, or territories of indigenous people?	☒ NO	
-	- Has an "Indigenous People Plan" (IPP) or "Indigenous People Plan Framework" been elaborated and included in the project documentation?	☐ NA	
-	- Was the plan developed in accordance with the effective and meaningful participation of indigenous peoples and in accordance with UNDP Guidelines?		
<u>P.4.4.3 </u>	risk of forcibly removing indigenous people from their lands and territories?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.4.4.4 </u>	utilisation and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? Consider, and where appropriate ensure, consistency with the answers under Principle 4.1 above	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.4.4.5 </u>	If answer to question above is "YES" or "POTENTIALLY"	☐ YES	
	- Did the project obtain free, prior and informed consent from indigenous people before taking their cultural, intellectual, religious, and/or spiritual property?	☒ NO	
<u>P.4.4.6 </u>		☐ NA	
	- Does the project ensure that the indigenous people receive an equitable sharing of benefits resulting from the use of their traditional knowledge and practices? ?		

	- Does the project ensure that the sharing of benefits resulting from the use of indigenous peoples' traditional knowledge and practices is culturally appropriate and inclusive?		
	- Does the project ensure that the provision of equitable sharing of benefits does not impede land rights or equal access to basic services including health services, clean water, energy, education, safe and decent working conditions, and housing?		
<u>P.4.4.8 </u>	Does the project lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives?	☐ YES	
-		☒ NO	
-		☐ NA	
<u>P.4.4.8 </u>	Has a grievance mechanism not been established at the beginning of programme or project implementation with due consideration given to customary dispute settlement mechanisms among the Indigenous Peoples concerned and will it remain operational throughout the project cycle?	☐ YES	
-		☒ NO	
-		☐ NA	
<u>P.4.4.9 </u>	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES	
-		☒ NO	
-		☐ NA	
<u>P.4.4.9 </u>	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	☐ YES	
-		☒ NO	
-		☐ NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.5 Corruption</u>	-	-	
<u>P.5.1.1 </u>	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	☐ YES	The PA does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☒ NO	
<u>P.5.1.1 </u>	Does the project have a risk of encouraging bribery, kickbacks, or other unethical behavior?	☐ YES	
-		☒ NO	
If the answer to any of the questions above is "yes," please explain project situation and how the project will			

ensure compliance with applicable requirements.			
NA			
ECONOMIC SAFEGUARDING PRINCIPLES			
P.6 Economic Impacts	-	-	
P.6.1 Labour Rights and Working Conditions	-	-	
P.6.1.1 	Does the project involve, facilitate, or condone forced labor, or pose a potential risk of forced labor?	☐ YES ☒ NO	The Project activity is said to conduct trainings for the workers in Health and safety during the operation phase and the project owners will comply with national labor and safety laws embodied in ILO. Workers can establish organization's and also there won't be any type of Child labour involved in the Project activity. All the information was confirmed by the audit team during the remote audit.
-			
P.6.1.1 	Does the project violate any labor or health and safety laws, international obligations, or ILO conventions?	☐ YES ☒ NO	
-			
P.6.1.2 	Does the project violate the principles of equal opportunity and fair treatment in its employment decisions?	☐ YES ☒ NO	
-			
P.6.1.3 	Does the project violate national laws, if available regarding non-discrimination in employment?	☐ YES ☒ NO	
-			
P.6.1.4 	Does the project allow child labor?	☐ YES	
P.6.1.5 		☒ NO	
P.6.1.7 	Does the project have insufficient processes and measures in place to ensure the safety and health of project workers?	☒ YES	
P.6.1.8 		☐ NO	
P.6.1.9 	Does the project have insufficient measures to safeguard and support vulnerable project workers, such as women, people with disabilities, migrant workers, and young workers, and to prevent any kind of harassment, abuse, bullying, or exploitation, including gender-based violence (GBV)?	☐ YES	
-		☒ NO	
P.6.1.10 	Does the project have no grievance mechanism available for workers to voice workplace concerns? Is information about this mechanism not provided to workers at the time of recruitment, or is it not easily accessible?	☐ YES	
-		☒ NO	
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			

<i>The Project Developer ensures the training of workers, documentation and reporting of accidents and incidents, and emergency preparedness and response measures.</i>		
Would the project potentially involve or lead to:		
(note: applies to both project and contractor workers)		
<u>P.6.1.1 </u>		☐ YES
-	use of forced labour?	☐ POTENTIALLY
-		☒ NO
<u>P.6.1.1 </u>		☐ YES
-	working conditions that do not meet national labour laws and international commitments?	☐ POTENTIALLY
-		☒ NO
<u>P.6.1.1 </u>		☐ YES
-	working conditions that may deny freedom of association and collective bargaining?	☐ POTENTIALLY
-		☒ NO
<u>P.6.1.1 </u>		☐ YES
-	absence of documented working agreements with all individual workers if such agreements do not exist, or do not address working conditions and terms of employment, the project developer shall provide reasonable working conditions and terms of employment.	☐ POTENTIALLY
-		☒ NO
<u>P.6.1.1 </u>		☐ YES
-	use of migrant workers? if engaged, the developer shall ensure that they are engaged substantially equivalent terms and conditions to non-migrant workers carrying out similar work.	☐ POTENTIALLY
-		☒ NO
<u>P.6.1.1 </u>		☐ YES
-	having no arrangements for basic services ^[1] for workers? the project developer shall put in place and implement policies on the quality and management of the accommodation and provision of basic services in a manner consistent with the principles of non-discrimination and equal opportunity. Workers' accommodation arrangements should not restrict workers' freedom of movement or of association	☐ POTENTIALLY
-		☒ NO

<u>P.6.1.2 </u>	any form of discrimination or harassment based on factors unrelated to job requirements, such as gender, race, nationality, ethnicity, social or indigenous origin, religion or belief, disability, age, or sexual orientation?	☐ YES
-		☐ POTENTIALLY
-		☒ NO
<u>P.6.1.2 </u>	any form of discrimination in any aspect of employment, such as recruitment, compensation, working conditions, training, job assignment, promotion, termination, or discipline?	☐ YES
-		☐ POTENTIALLY
-		☒ NO
<u>P.6.1.2 </u>	harassment, intimidation, and/or exploitation, especially in regard to women?	☐ YES
-		☐ POTENTIALLY
-		☒ NO
<u>P.6.1.3 </u>	discriminatory working conditions and/or lack of equal opportunity where national law provides provision to address non-discrimination in employment?	☐ YES
-		☐ POTENTIALLY
-		☒ NO
<u>P.6.1.4 </u>	use of child labour? (including third-party engaged workers)	☐ YES
-		☐ POTENTIALLY
-		☒ NO
<u>P.6.1.4 </u>	inadequate and verifiable mechanisms for age verification?	☐ YES
-		☒ NO
<u>P.6.1.7 </u>	no processes and measures in place for the safety and health of project workers?	☐ YES
-		☒ NO
<u>P.6.1.7 </u>	No provision of safety and health training provisions, including on the proper use and maintenance of personal protective equipment conducted by competent persons and the maintenance of training records?	☐ YES
-		☒ NO
<u>P.6.1.7 </u>	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	☒ YES
-		☐ NO
<u>P.6.1.8 </u>	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	☒ YES
-		☐ NO
<u>P.6.1.9 </u>	No measures to protect vulnerable project workers from harassment, exploitation, and gender-based violence (GBV)? This includes women, people with disabilities, migrant workers, and young workers.	☐ YES
-		☒ NO
<u>P.6.1.10 </u>	No grievance mechanism available for workers to voice workplace concerns.	☐ YES
-		☒ NO
<u>P.6.1.11 </u>	No measures for due diligence and the establishment of policies and procedures to manage and monitor the performance of third-party employees in the project?	☐ YES
-		☒ NO

If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
P.6.1.8 - The Project Developer ensures the training of workers, documentation and			
reporting of accidents and incidents and emergency preparedness and response measures. All the supporting documents are been provided as follows:			
Training Attendance sheets.			
Employee Records			
Salary slips of the employees			
P.6.2 <u>Negative Economic Consequences</u>	-	-	
P.6.2.1	Is there a risk of project failure during implementation or after project certification due to a lack of financial resources?	☐ YES	The PD does not identify any risk against the defined principle. The justification provided by the PD was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☒ NO	
P.6.2.2	Does the project have potential negative impacts or pose a risk to the local economy?	☐ YES	
-		☒ NO	
P.6.2.2	Are there any potential risks or negative impacts this project may have on vulnerable or marginalised social groups, despite the benefits it may bring?	☐ YES	
-		☒ NO	
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
NA			
Would the project involve or lead to:			
P.6.2.2		☐ YES	

-	economic impacts (negative/detrimental) to the local economy?	☐ POTENTIALLY	
-		☒ NO	
<u>P.6.2.2 </u>	negative economic consequences during and after project implementation, e.g., for vulnerable and marginalised social groups in targeted communities?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.7 Climate and Energy</u>	-	-	
<u>P.7.1 GHG Emissions</u>	-	-	
<u>P.7.1.1 </u>	Does the project have a risk of increasing greenhouse gas emissions over the Baseline Scenario?	☐ YES	
-		☒ NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
NA			
Would the project involve or lead to:			
<u>P.7.1.1 </u>	increase greenhouse gas emissions over the Baseline Scenario?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.7.2 Energy supply</u>	-	-	
<u>P.7.2.1 </u>	Does the project pose a risk to the availability and reliability of energy supply to other users?	☐ YES	
-		☒ NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with			The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.

applicable requirements.			
NA			
Would the project involve or lead to:			
<u>P.7.2.1</u>		☐ YES	
-	negative impact on the availability and reliability of energy supply to other users?	☐ POTENTIALLY	
-		☒ NO	
If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.8 Water</u>	-	-	
<u>P.8.1 Impact on Natural Water Patterns/Flows</u>	-	-	
<u>P.8.1.1</u>	Does the project increase water usage to a level that will not allow for the maintenance of environmental flows?	☐ YES	
-		☒ NO	
<u>P.8.1.1</u>	Does the project result in the discharge of wastewater that does not meet the required standard for beneficial reuse and could therefore negatively impact the environmental flow?	☐ YES	
-		☒ NO	
<u>P.8.1.1</u>	Does the project have the potential risk to exceed the rate of recharge for the groundwater source?	☐ YES	
-		☒ NO	
<u>P.8.1.1</u>	Does the project involve any processes or activities that could contaminate the groundwater and render it unsuitable for use?	☐ YES	
-		☒ NO	
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
NA			
Would the project involve or lead to:			
<u>P.8.1.1</u>	affect the natural or pre-existing pattern of watercourses, groundwater and/or the watershed(s) such as high seasonal flow variability, flooding potential, lack of aquatic connectivity or water scarcity?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.8.1.1</u>	Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	☐ YES	
-		☐ POTENTIALLY	

-		☒ NO	
<u>P.8.1.1 </u>	significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.8.1.2 </u>	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES	
-		☒ NO	
-		☐ NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
<i>NA</i>			
<u>P.8.2 Erosion and/or Water Body Instability</u>	-	-	
<u>P.8.2.1 </u>	Does the project have a risk of negatively impacting the catchment and has it been assessed and addressed?	☐ YES	The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☒ NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
<i>NA</i>			
Would the project involve or lead to:			
<u>P.8.2.2 </u>	negatively impact on the catchment area?	☐ YES	
-		☐ POTENTIALLY	
<u>P.8.2.5 </u>	<i>If yes, Erosion prevention measures, including soil and slope protection measures, must be implemented before project commencement. These measures should involve natural terracing, infiltration strips, permanent ground cover, hedge and tree rows, and effective slope length assessment. Regular reassessment of these measures is necessary.</i>	☒ NO	
<u>P.8.2.6 </u>	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES	
-		☐ NO	
-		☒ NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
<i>NA</i>			
<u>P.9 Environment</u>	-	-	

ecology and land use			
<u>P.9.1 Landscape Modification and Soil</u>	-	-	
<u>P.9.1.1 </u>	Is there any risk of soil resource degradation or loss of ecosystem services provided by soils in the project? If yes, the project shall maintain healthy soils by minimising negative impacts on soil health, productivity, structure, and water retention. Steps to minimise soil degradation include crop rotation, composting, using N-fixing plants, and reducing tillage and ecologically harmful substances.	☐ YES	The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☒ NO	
<u>P.9.1.3 </u>			
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
NA			
Would the project involve or lead to:			
<u>P.9.1.4 </u>	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.9.1.4 </u>	if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices?	☐ YES	
-		☒ No	
-		☐ NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.9.2 Vulnerability to Natural Disaster</u>	-	-	
<u>P.9.2.1 </u>	Does the project have any risks associated with natural or man-made hazards that could result from land use changes due to the project?	☐ YES	The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☒ NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with			

applicable requirements.			
NA			
Would the project involve or lead to:			
<u>P.9.2.2 </u>		☐ YES	
-	any potential risks that require emergency preparedness and response planning?	☐ POTENTIALLY	
-		☒ NO	
<u>P.9.2.2 </u>		☐ YES	
-	if answer to above question "yes" or "potentially", did the project developer disclose appropriate information about emergency preparedness and response to affected communities?	☒ No	
-		☐ NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.9.3 Biosafety and Genetic Resources</u>	-	-	
<u>P.9.3.1 </u>	Does the project involve the transfer, handling, and use of genetically modified organisms/living modified organisms that may result in adverse effects on biological diversity?	☐ YES	
-		☒ NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
NA			
Would the project involve or lead to:			
<u>P.9.3.1 </u>	the transfer, handling and use of genetically modified organisms/living modified organisms (GMOs/LMOs) that result from modern biotechnology	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.9.3.1 </u>	If answer to above question is "yes" has a risk assessment by a competent Expert stakeholder been carried out in accordance with Annex iii of the Cartagena protocol on biosafety to the convention on biological diversity?	☐ YES	
-		☒ No	
-		☐ NA	
<u>P.9.3.2 </u>	If answer to above question is "yes" has any risks identified in the risk assessment?	☐ YES	
-		☒ No	
-		☐ NA	

<u>P.9.3.3 </u>	Forestry (for example Afforestation/Reforestation) involving GMO planting? Note - Forestry projects (for example Afforestation/ Reforestation) involving GMO planting are not eligible for Certification under Gold Standard for the Global Goals.	☐ YES	
-		☒ No	
-		☐ NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
<u>NA</u>			
<u>P.9.4 Release of pollutants</u>	-	-	
<u>P.9.4.1 </u>	Does the project have a risk of releasing pollutants to air, water, and land in routine, non-routine, or accidental circumstances?	☐ YES	The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☒ NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
<u>NA</u>			
Would the project involve or lead to:			
<u>P.9.4.1 </u>	any potential risk of pollutant release that cannot be avoided?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.9.4.3 </u>	If answer to above question is "Yes" or "potentially", has the project identified all potential pollution sources that may degrade the quality of soil, air, surface, and groundwater in the project area?	☐ YES	
-		☒ No	
-		☐ NA	
<u>P.9.4.2 </u>	If answer to above question is "Yes" or "potentially", do the pollution prevention and control technologies and practices applied during the project life cycle align with national regulations or international best practices?	☐ YES	
-		☒ No	
-		☐ NA	
<u>P.9.4.3 </u>	If answer to above question is "Yes", is there a monitoring plan to ensure that mitigation measures are implemented, and resources are protected?	☐ YES	
-		☒ No	
-		☐ NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
<u>NA</u>			
<u>P.9.5 Hazardous and Non-hazardous Waste</u>	-	-	

<u>P.9.5.1</u>	Does the project involve the generation of waste materials (both hazardous and non-hazardous)?	☒ YES	The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☐ NO	
<u>P.9.5.3</u>	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☒ YES	
-		☐ NO	
<u>P.9.5.5</u>	Does the project involve the use of any chemicals or materials subject to international bans or phase-outs?	☐ YES	
-		☒ NO	
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
<i>P.9.5.1 and P.9.5.3- A hazardous waste inventory is maintained as per the provisions of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008.</i>			
Would the project involve or lead to:			
<u>P.9.5.1</u>	the generation and management of waste materials?	☒ YES	
-		☐ POTENTIALLY	
-		☐ NO	
<u>P.9.5.1</u>	treatment, destruction, or disposal of waste material?	☒ YES	
-		☐ No	
-		☐ NA	
<u>P.9.5.1</u>	If answer to above question is "Yes", does the project involve an environmentally friendly method that includes appropriate control of emissions and residues resulting from the handling and processing of waste material?	☒ YES	
-		☐ No	
-		☐ NA	
<u>P.9.5.3</u>	risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES	
-		☒ No	
-		☐ NA	
<u>P.9.5.3</u>		☐ YES	
-		☐ No	

-	If answer to above question is "yes", does project have measures in place to address health risks?	☒ NA	
P.9.5.4	Involve manufacture, trade, and use of chemicals and hazardous materials subject to international bans or phase-outs due to their high toxicity to living organisms, environmental persistence, potential for bioaccumulation, or potential for depletion of the ozone layer	☐ YES	
-		☒ POTENTIALLY	
-		☐ NO	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
P.9.5.1 - A hazardous waste inventory is maintained as per the provisions of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008.			
The waste is disposed to the waste handlers and the firm complies with all the local laws for monitoring and disposal.			
P.9.6 Pesticides & Fertilisers	-	-	
P.9.6.1	Does the project involve the use of chemical pesticides?	☐ YES	The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☒ NO	
P.9.6.5	Does the project involve purchase, store, manufacture, trade or use products that fall in Classes IA (extremely hazardous) and IB (highly hazardous)	☐ YES	
-		☒ NO	
P.9.6.6	Does the project use fertilisers, and if so, are measures being taken to minimise their use and nutrient losses to the environment?	☐ YES	
-		☒ NO	
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
NA			

Would the project involve or lead to:			
<u>P.9.6.1</u>		☐ YES	
-	chemical pesticides use for pest management?	☐ POTENTIALLY	
-		☒ NO	
<u>P.9.6.4</u>		☐ YES	
-	If answer to question above is "yes" or "potentially", does project has documented Chemical Pesticides Policy in place?	☐ No	
-		☒ NA	
<u>P.9.6.5</u>		☐ YES	
-	purchase, store, use, manufacture, or trade in Class II (moderately hazardous) pesticides?	☐ POTENTIALLY	
-		☒ NO	
<u>P.9.6.5</u>		☐ YES	
-	If answer to question above is "yes" or "potentially", does project has appropriate controls on manufacture, procurement, or distribution and/or use of these chemicals?	☐ No	
-		☒ NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.9.7 Harvesting of Forests</u>	-	-	
<u>P.9.7.1</u>		☐ YES	
-	Does the project have a risk of unsustainable forest management, including timber harvesting?	☒ NO	
-			
<u>P.9.7.1</u>		☐ YES	
-	Does the project pose a risk of depleting biodiversity and ecosystem functionality in areas where improved forest management is undertaken?	☒ NO	
<u>P.9.7.1</u>		☐ YES	
-	Does the project risk not meeting requirements for environment-friendly, socially beneficial, and economically viable plantations using native species whenever possible?	☒ NO	
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
NA			
<u>P.9.8 Food Security</u>	-	-	
<u>P.9.8.1</u>		☐ YES	
-	Does the project involve the risk of negatively influencing access to and availability of food for people affected?	☒ NO	
The PD does not identify any risk against the defined principle.			

If the answer to the question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
NA			
Would the project involve or lead to:			
P.9.8.1	modification of the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
P.9.9 Animal Welfare	-	-	
P.9.9.1	Does the project involve any risks to animal welfare? Animal welfare shall be ensured by providing access to water and food, appropriate environment, humane treatment, and staff training. Evidence of mistreatment will be treated as an immediate non-conformity.	☐ YES	The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☒ NO	
P.9.9.2	Does the project involve any potential risk of excessive or inadequate use of veterinary medicines?	☐ YES	
-		☒ NO	
P.9.9.4	Does the project involve the risk of administering synthetic growth promoters, including hormones?	☐ YES	
-		☒ NO	

If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
NA		
Would the project involve or lead to:		
P.9.9.1	animal husbandry or harvesting of fish populations or other aquatic species?[2]	☐ YES
-		☒ No
-		☐ NA
P.9.9.1	limiting access for animals to basic needs like drinking water, adequate food, daylight, appropriate shelter etc.?	☐ YES
-		☒ POTENTIALLY
-		☐ NO
P.9.9.3	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	☐ YES
-		☒ no
-		☐ NA
P.9.9.5	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	☐ YES
-		☒ No
-		☐ NA
P.9.9.6	inadequate measures to ensure that animals are exposed to the least stress possible during transportation and slaughtering?	☐ YES
-		☐ No
-		☒ NA
P.9.9.7	inappropriate spacing per animal and stocking rates per land unit?	☐ YES
-		☐ No
-		☒ NA
P.9.9.8	inadequate measures to address the specific needs of aquatic animals?	☐ YES
-		☐ No
-		☒ NA
P.9.9.9 P.9.9.10 ↓	primary production of living natural resources such as animal husbandry, aquaculture, and fisheries? If the answer is yes, implement industry-standard sustainable management practices in line with to one or more relevant and credible standards and utilise available technologies.	☐ YES
-		☐ No
-		☒ NA
If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.		
P 9.9.1 -The project will not have any effect on the biodiversity of the region as the location of the project does not impinge on any biodiversity hotspots, nature reserves, national parks, or habitat for rare plants and/or animals.		

<u>P.9.10 High Conservation Value Areas and Critical Habitats</u>	-	-	
<u>P.9.10.1 </u>	Does the project have the risk of negatively impacting HCV areas and/or critical habitats?	☐ YES	The PA does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☒ NO	
<u>P.9.10.2 </u>	Does the project in the project area or area of downstream impacts have risks to the following: native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	☐ YES	
-		☒ NO	
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
<i>NA</i>			
Would the project involve or lead to:			
<u>P.9.10.1 </u>	identified habitats as HCV areas and or Critical habitats?	☐ YES	
-		☒ POTENTIALLY	
-		☐ NO	
<u>P.9.10.1 </u>	If answer to above question is "yes", does the project have any risks that could negatively impact the catchment, project success, and surrounding HCV and ecological assets, as well as any measurable adverse impacts on the criteria or biodiversity values for which the critical habitat was designated, and on the ecological processes supporting that biodiversity?	☐ YES	
-		☐ NO	
-		☒ NA	
<u>P.9.10.1 </u>	If answer to above question is "yes", is a robust, appropriately designed, and long-term Habitats and Biodiversity Action Plan absent which will make the project unable to achieve net gains of those biodiversity values for which the critical habitat was designated?	☐ YES	
-		☒ NO	
-		☐ N/A	
<u>P.9.10.2 </u>	Does the project area or area of downstream impacts have native tree patches, individual native trees, freshwater resources (including rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.9.10.2 </u>		☐ YES	

-	If the answer to the above question is "yes", will the project have any adverse effects on these areas?	☒ No	
-		☐ NA	
<u>P.9.10.3</u>	If the answer to above question is "yes", does the project has opportunities to minimise unwarranted conversion or degradation of the habitat and to enhance the habitat as part of its development?	☐ YES	
-		☒ No	
-		☐ NA	
<u>P.9.10.4</u>	Is the project applying Land Use & Forest Activity Requirements and managing a minimum 10% of the project area to protect or enhance the biological diversity of native ecosystems following HCV approach as per the given requirements?	☐ YES	
-		☒ No	
-		☐ NA	
<u>P.9.10.5</u>	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES	
-		☒ NO	
-		☐ NA	
If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
<i>P.9.10.1 - The project will not have any effect on the biodiversity of the region as the location of the project does not impinge on any biodiversity hotspots, nature reserves, national parks, or habitat for rare plants and/or animals.</i>			
<u>P.9.11</u> <u> Endangered Species</u>	-	-	
<u>P.9.11.1</u>	Does the project lead to the reduction or negative impact on any recognised Endangered, Vulnerable or Critically Endangered species?	☐ YES	
-		☒ NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
NA			
Would the project involve or lead to:			
<u>P.9.11.2</u>	distortion of habitats of endangered species?	☐ YES	
-		☐ Potentially	
-		☒ NA	
<u>P.9.11.2</u>	If answer to the above question is "yes", does the project plan to protect and enhance them?	☐ YES	
-		☐ POTENTIALLY	
-		☐ NO	
-		☒ N/A	

<u>P.9.11.2</u>	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	☐ YES	
-		☐ NO	
-		☒ NA	
If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
<i>NA</i>			
<u>P.9.12</u> <u>Invasive Alien species</u>	-	-	
<u>P.9.12.1</u>	Does project introduce any alien species (not currently established in the country or region of the project) into new environments?	☐ YES	The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the audit team during the remote audit and interview.
-		☒ NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
<i>NA</i>			
Would the project involve or lead to:			
<u>P.9.12.1</u>	risk of introducing any alien species with a high risk of invasive behaviour regardless of whether such introductions are permitted under the existing regulatory framework?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.9.12.1</u>	risk of potential accidental or unintended introductions including the transportation of substrates and vectors (such as soil, ballast, and plant materials) that may harbour alien species.	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.9.12.2</u>	risk of spreading alien species into areas in which they have not already been established?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
If the answer is "yes" or "potentially" to any of the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to			

demonstrate compliance with applicable requirements.			
NA			

1[1] Basic services requirements refer to minimum space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, noise, fire, and disease-carrying animals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.

1[2] 'Involve' means if the project mechanism and/or impact(s) are achieved via changing animal husbandry practices in some way.