

**GOLD STANDARD FOR THE GLOBAL GOALS (GS4GG)
REPORT
-
DESIGN CERTIFICATION (RENEWAL)**



Project Title:	50.6 MW Wind Power Project at Umralli, Gujarat by Powerica Limited
GS project ID:	GS 7620
Internal ID:	A+SH_SYST_TQC_GS_VER_RCP_4225
Customer:	Powerica Limited
Project Participant/s:	Powerica Limited
Date:	17/10/2025
Revision:	04

SUMMARY			
Reference No.	Date (first version)	Version No.	Date (last version)
A+SH_SYST_TQC_GS_VER_RCP_4 225	11/08/2025	04	17/10/2025
Client	Powerica Limited		
Project Title	50.6 MW Wind Power Project at Umrali, Gujarat by Powerica Limited		
Project Participants	Powerica Limited		
Project Location	Ambliyara, Betavad, Umrali, Trakuda and Padlava villages of Rajkot district of Gujarat State of India		
Contact Person	Sumita Rajamanickam		
GS4GG Version: PRINCIPLES & REQUIREMENTS , Version 2.1 GS4GG Activity Requirements: RE Activity Requirements, Version 1.4 Applied Methodology Version: ACM0002: Grid-connected electricity generation from renewable sources, Version 22.0 The following tools and guidance's have been followed (References): • Tool 11 "Assessment of the validity of the original / current baseline and update of the baseline at the renewal of the crediting period." (Version 03.0.1)¹. • Tool 07: Tool to calculate the emission factor for an electricity system (Version 07.0)² • Tool 01 Methodological tool: Tool for the demonstration and assessment of additionality Version 07.0.0 (during project registration) • Tool 27- "Tool for the Investment analysis" Version 14.0³ • Tool 24- "Common practice", Version 3.1⁴		GS4GG Sectoral Scope: 2 UNFCCC CDM Sectoral Scope: 1 Technical Area: 1.2	
GS4GG First PDD Version: 01 (for RCP) Date: 30/06/2025			
		GS4GG Final PDD Version: version 05 (for RCP) Date: 26/09/2025	
Estimated Annual SDG Impacts:			
Sustainable Development Goals Targeted	SDG Impact	Estimated Annual Average	
7 Affordable and Clean Energy	MWh of renewable energy generated	177,302 MWh/Year	
8 Decent Work and Economic Growth	Employees	10 employments	
	Trainings	One training annually	

¹ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-11-v3.0.1.pdf>

² <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf>

³ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-27-v14.0.pdf>

⁴ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-24-v1.pdf>

13 Climate Action (mandatory)	Emission Reduction	152,692 tCO ₂ e/year
Selected Sustainable Development Goals (SDGs): 7; 8; 13		
Design Certification Summary		
LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by Powerica Limited to perform the GS Design Certification Renewal (Design Certification Renewal) of "50.6 MW Wind Power Project at Umralli, Gujarat by Powerica Limited" applying the methodology ACM0002, Version 22.0. The management of Powerica Limited is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions. A desk review and remote audit for Design Certification Renewal have been conducted to verify the data submitted in the GS4GG PDD. Applus+ Certification confirms the following have been reviewed: - GS4GG approved PD of first CP and the corresponding validation report; - GS Transition Annex - The applied monitoring methodology; - Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board; - The Gold Standard for Global Goals "Principles and Requirements" Version 2.1. - All information and references relevant to the project activity's resulting in estimated emission reductions. The scope of the Design Certification Renewal is defined as an independent and objective review of the project design document, against the applicable CDM guidelines/tools and requirement of Gold Standard. The validation report is finalized based on the assessment of the Gold Standard GS4GG PDD and applying standard auditing techniques including but not limited to document reviews, follow up actions (e.g., remote audit, telephone or e-mail interviews) and also the review of the applicable approved methodology and underlying formulae and calculations. The report and the annexed validation checklist describe a total number of findings which include: 06 Corrective Action Requests (CARs); 01 Clarification Requests (CLs); 01 Forward Action Requests (FARs for future verifier). The PP has responded these findings by modifying the Gold Standard GS4GG PDD and providing adequate additional explanations and evidences. Applus+ Certification confirm that all the findings have been "closed out" before submitting the request for renewal to GS board (Renewal of Crediting period). The annual estimated emission reductions for this second crediting period are 152,692 tCO₂e and total emission reductions for the whole second crediting period are estimated to be 763,460 tCO₂e. As a summary of the Design Certification Renewal, the review of the Gold Standard GS4GG PDD and the subsequent follow-up interviews have provided Applus+ Certification with sufficient evidence for the determination of the project's fulfilment with all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM and requirement of Gold Standard. Therefore, Applus+ Certification recommends the project for renewal of crediting period by the GS Registry as GS VER project.		

ASSESSMENT TEAM		
Team Members	Type of Resource⁵	Organization (for OEs)
Lead Auditor & Validator, GS Approved Auditor: Mr. Ishan Shrivastava	☐ IR ☐ EI ☒ OE	M/s True Quality Certifications Private Limited

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

ASSESSMENT TEAM		
Team Members	Type of Resource ⁵	Organization (for OEs)
Technical Reviewer/ Technical Expert: Mr. Denny Xue	☐ IR ☒ EI ☐ OE	LGAI Technological Center, S.A. (Applus+ Certification)

Note: In accordance with the rotation rules, the VVB is declaring that; VVB is performing both verification of CP 1. VVB teams for Verification falling under CP 1 (LA: Mr. Amit Rai & TR Mr. David Lubanga) and Renewal of Crediting Period (2nd CP as above table) are different Teams. Thus, the VVB is in compliance with the applicable team rotation rules and requirements of the GS4GG.

ABBREVIATIONS	
AMS	Approved Methodology Small Scale
Applus+ LGAI / Applus+	LGAI Technological Center, S.A. (Applus+ Certification)
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
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
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
NGO	Non-Governmental Organization
Design Certification Renewal	Validation for Renewal of Crediting Period
SDG	Sustainable Development Goal
TAC	Gold Standard Technical Advisory Committee
OM	Operational Margin
PP	Project Participant
PS	Project Standard
WPP	Wind Power Project
PPA	Power Purchase agreement
UNFCCC	United Nations Framework Convention for Climate Change
VVB	Validation and Verification Body
VVS	CDM validation and verification standard for project activities, Version 03.0

Table of Content

Contents

1.	INTRODUCTION	7
1.1	Objective	9
1.2	Scope	9
2.	METHODOLOGY.....	10
2.1	Appointment of the assessment team.....	10
2.2	Document review.....	11
2.3	Follow up Interviews.....	11
2.4	Resolution of Clarification and Corrective Action requests.....	13
2.5	Internal Quality Control	13
3.	PROJECT DESIGN CERTIFICATION ASSESSMENT	14
3.1	Approval	14
3.2	Participation.....	14
3.3	Scale of the project	14
3.4	Greenhouse Gases.....	15
3.5	Project timeframe	15
3.6	Public announcement	15
3.7	Project Boundary	15
3.8	Baseline Identification	16
3.9	Calculation algorithm and/or formula used to determine emission reductions ..	53
4.	REFERENCE	56
5.	FINAL PROJECT DESIGN CERTIFICATION RENEWAL STATEMENT	58

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

Appendix 2: Audit Team CVs.

Appendix 3: Energy Meter Details.

1. INTRODUCTION

Powerica Limited has commissioned Applus+ Certification to perform a Design Certification renewal of "50.6 MW Wind Power Project at Umralli, Gujarat by Powerica Limited" (hereafter referred to as the project activity). This validation report summarizes the findings of the Design Certification Renewal of the project, performed on the basis of UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM modalities and procedures and the subsequent decisions by the CDM/GS Executive Board as well as requirement of Gold Standard.

The project activity primarily aims at reducing Green House Gas (GHG) emissions through utilization of renewable energy technology for generation of electrical energy. The electricity generated from the project activity (approximately 177,302 MWh annually) will displace equivalent electricity generation in grid connected power plants. The project activity will reduce the anthropogenic GHG emissions (approximately 152,692 tCO₂e annually) associated with the equivalent amount of electricity generation from Indian national grid connected power plants predominantly fossil fuel based.

The project activity is a 51.3 MW Wind Energy Project, promoted by Powerica Limited. The purpose of the project activity is to generate clean electricity with utilization of wind energy. The project activity includes implementation and operation of 51.3 MW wind energy electricity generation from 19 GE made WTGs each with capacity 2.7 MW. The electricity generated by the project is exported to the Indian grid. The project activity therefore displaces an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant electricity grid and there by reduces the associated CO₂ emissions.

Powerica Limited signed a Power Purchase Agreement (PPA) with Gujarat Urja Vikas Nigam Limited (GUVNL) on 29/07/2019 for a contracted capacity of 50.6 MW. However, due to the technical specifications of the installed Wind Turbine Generators (WTGs), the maximum installed capacity stands at 51.3 MW. Despite this, Powerica Limited is permitted to inject and sell electricity only up to the contracted capacity of 50.6 MW, as verified through PPA.

Assessment team checked the technical specifications from the manufacturer manual and the details are as below. Assessment team also confirm that the details are same as mentioned in the registered PDD.

Technical details of wind turbines:

Particulars	Details
WTG Make	GE
Model no.	2.7-132-50 Hz
Operational Data	
Rated Power	2,700 KW
Cut-in-wind speed	3.0 m/s
Cut-out wind speed	20.0 m/s
Rotor	
Rotor Diameter	132 m
Swept Area	13,684 m ²
Electrical	
Generator Type	Doubly-fed induction type
Gear Box	

Type	Multi-stage planetary/helical gear design
Tower	
Hub Height	130 m

The first crediting period of the project activity was between 06/10/2020 to 05/10/2025 and the start date of the second crediting period of the project is from **06/10/2025 to 05/10/2030**.

Assessment team checked the technical parameters of the project equipment with registered PDD, commissioning certificates & technical specifications and confirmed during interviews with PP and confirm that the details as mentioned in the GS PDD submitted for 2nd CP are correct.

Technology Transfer

No technology transfer from other countries is involved in the project.

The project activity is the installation of a new grid-connected renewable power plant/unit and this is not a CPA that has been excluded from a registered CDM PoA as a result of erroneous inclusion of CPAs.

The start date of the project activity is 19/07/2019 the date that corresponds to the date of supply contract between PP and WTG supplier After the signing of supply contract, the project activity has started commercial operation in three phases 7 WTGs on 06/10/2020, 3 WTGs on 07/10/2020 and 9 WTGs on 06/11/2020. The project activity is connected to the INDIAN grid.

Number of WTGs	Total Capacity (MW)	Date of commissioning
7	18.9	06/10/2020
3	8.1	07/10/2020
9	24.3	06/11/2020

The details of geo-coordinates are cross-checked from PDD via google maps are as below:

S.No.	Location No.	Village Name	Taluka	Geo Co-ordinates
1	TKD-01	Trakuda	Gondal	21°58'34.9"N
				70°38'49.7"E
2	TKD-02	Trakuda	Gondal	21°58'07.7"N
				70°38'38.2"E
3	TKD-04	Trakuda	Gondal	21°57'56.6"N
				70°37'03.8"E
4	AMB-01	Ambaliyala	Kotda Sangani	22°02'02.5"N
				70°37'06.0"E
5	AMB-03	Ambaliyala	Kotda Sangani	22°02'33.2"N
				70°37'02.4"E
6	AMB-05	Ambaliyala	Kotda Sangani	22°02'46.7"N
				70°36'43.4"E
7	AMB-07	Ambaliyala	Kotda Sangani	22°02'52.3"N

				70°37'42.6"E
8	AMB-06	Ambaliyala	Kotda Sangani	22°02'50.5"N
				70°37'12.3"E
9	AMB-08	Ambaliyala	Kotda Sangani	22°03'28.2"N
				70°37'47.2"E
10	BTV-02	Betavad	Gondal	22°00'41.2"N
				70°37'16.9"E
11	BTV-06	Betavad	Gondal	22°01'38.2"N
				70°36'43.8"E
12	BTV-05	Betavad	Gondal	22°01'38.8"N
				70°37'11.9"E
13	CPD-01	Champabeda	Kotda Sangani	22°05'42.4"N
				70°35'50.5"E
14	CPD-03	Champabeda	Kotda Sangani	22°06'20.7"N
				70°35'59.1"E
15	NGH-01	Noghanchora	Kotda Sangani	22°05'22.5"N
				70°34'31.6"E
16	NGH-02	Noghanchora	Kotda Sangani	22°05'29.0"N
				70°34'12.1"E
17	TDI-01	Thordi	Kotda Sangani	22°06'16.3"N
				70°38'30.1"E
18	TDI-02	Thordi	Kotda Sangani	22°06'16.2"N
				70°38'00.2"E
19	TDI-04	Thordi	Kotda Sangani	22°04'43.5"N
				70°38'24.0"E

1.1 Objective

The purpose of the Design Certification Renewal is to have an independent third-party assessment of the GS4GG PDD for renewal of crediting period and compliance with the GS requirements as described in the Gold Standard documentation and supporting documents by the client. Validation is part of the GS VER project cycle and will finally result in a conclusion by Applus+ Certification whether a project activity is valid and should be submitted for registration/renewal of crediting period of a project activity rests at the GS and the Parties involved.

1.2 Scope

The Design Certification Renewal scope is defined as an independent and an objective review of the project PDD, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against all applicable GS requirements including the approved baseline and monitoring methodology ACM0002, Version 22.0. The validation was based on the requirements in the Gold Standard GS4GG requirements; Principles and Requirements" Version 2.1 & GS4GG Validation and Verification Standard, version 2.0 etc.

The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the PDD.

2. METHODOLOGY

The project assessment is based on the GS4GG Validation and Verification Standard, version 2.0, Gold Standard requirement for GS4GG and is conducted using standard auditing techniques to assess the correctness of the information provided by the project participants. Before the assessment begins, members of the team covering the technical scope(s), sectoral scope(s), and relevant host country experience for evaluating the project activity are appointed. Once the project is made available for Applus+ Certification, the members of the assessment team carried out:

1. A desk review of the PDD;
2. Remote Audit & follow-up interviews with project stakeholders;
3. Document Review
4. The resolution of outstanding issues and the issuance of the final validation report and opinion.

The prepared validation report and other supporting documents then undergo an internal quality control before being submitted to the GS Registry.

The GS overview documents which are referred as DVR is as below

Validation Checklist Table 3: Resolution of Audit Findings			
Type:	☐ CAR	☐ CL/CR	☐ FAR
Number:			
Raised by:			
Description of the audit finding	Date:		
The description of the audit finding should be clearly included here.			
Project Participant's response	Date:		
The responses given by the project participants during the communications with the validation team should be included here.			
Documentation provided as evidence by Project Participant			
The evidences provided by the project participants should be included here.			
Auditor's assessment comment	Date:		
This section should include how the audit finding is assessed by the assessment team.			

The Complete List of CAR/CL/FAR is included as Appendix 1 of this report.

2.1 Appointment of the assessment team

According to the applicable sectoral scope / technical area and experience in the sectoral or national business environment, Applus+ Certification has composed an assessment team in compliance with the Contract Review and Assessment Team appointment rules in the internal Quality Management System of Applus+ Certification as well as in compliance with the applicable requirements in the Accreditation Standard.

The composition of the Assessment Team (Applus+ Certification's validation team) has been approved by Applus+ Certification during the Contract Review process ensuring that the required skills and capabilities are covered.

The qualification levels for Assessment Team members that are assigned by aforementioned appointment rules are as presented below:

- Lead Auditor (LA).
- Auditor (A)/Validator/Verifier.
- Technical Expert (TE).
- Technical Reviewer (TR).
- Country Expert (CE)/Local Expert (LE).
- Other supporting roles such as Financial Expert (FE), GS Approved Auditor.
- Any of the above-mentioned roles in training (iT, e.g. AiT for auditor in training/TEiT for Technical Expert in Training).

The Sectoral Scopes / Technical Areas required knowledge linked to the applied methodology(ies) is covered by the Assessment Team as shown below:

Name	Role	SS Coverage	TA Coverage	Financial aspect	Host country experience
Mr. Ishan Shrivastava	Lead Auditor, Validator, Technical Expert & GS approved auditor	YES	YES	YES	YES
Mr. Denny Xue	Technical Reviewer/ Technical Expert	YES	YES	YES	NA

The complete list of CVs is included as Appendix 2 of this report.

2.2 Document review

The Gold Standard PDD submitted by the Client was reviewed against the approved methodology and other relevant criteria to verify the correctness, credibility, and interpretation of the presented information. Furthermore, a cross-check between information provided and information from other sources has been done. A complete list of all documents and evidence material reviewed is included in Section 4 of this report.

2.3 Follow up Interviews

A complete desk review of the PDD as well as all applicable country legal requirement and supportive evidences have been checked by the Assessment team. A remote audit was performed for re-validation has been conducted for the renewal of crediting period of the project activity as it was not mandatory at the validation (Design Certification or Design Certification Renewal) of a project.

A remote was performed for re-validation of this project and VVB used appropriate audit techniques during the remote audit of project activity.

In order to allow a credible and sufficient means for the present validation, the VVB adopted standard auditing techniques for validation in line with GS4GG interim guidelines, as follows:

- Assessment team has performed interview with PD in order to check implementation, current situation, evaluation of data management, QA/QC system, project technology, training provided, monitoring, calibration etc. Cross checks between information provided by interviewed personnel (i.e. by checking sources) to ensure that no relevant information has been omitted.
- Nameplates of all the major equipment's & metering arrangements.
- Document review.
- Interview with PP representatives (responsible for the management and monitoring of project activity), and Interview with stakeholders
- Cross-check evaluation, for information received from interviews, under the scope of all information and references provided in the PDD and supporting documents.

As a part of the Design Certification Renewal, the remote audit has been performed by the assessment team. In accordance with Section 9.7.2 (e) of GS4GG Validation and Verification Standard version 2.0, In order to maintain confidentiality of the interviewee's information, Details has been provided in separate file and will be submitted to GS along with final reports.

Interviewed Personnel	Functions	Organization
Ms. XXXXXXXX	PD representative	M/s Powerica Limited
Mr. XXXXXXXX	Plant Manager	
Mr. XXXXXXXX	Senior Engineer Powerica Ltd.	
Mr. XXXXXXXX	Asst. Manager	
Mr. XXXXXXXX	Senior Engineer	
Mr. XXXXXXXX	Site In-charge	
Mr. XXXXXXXX	Villager	Local stakeholder
Mr. XXXXXXXX	Farmer	
Mr. XXXXXXXX	Shopkeeper	

The details activity done during remote audit is as below:

Duration of Site visit (Remote): 10/07/2025				
No.	Activity performed during Site visit	Site location	Date	Team member
1.	Assessment team checked the implementation of the project, Baseline emission, Emission reduction calculation, technical description of the project and Monitoring. (Discussion with PP) Assessment team interviewed the local stakeholder and confirmed that there is no grievance resulted from the project activity in and out of the project location. The stakeholder confirmed that the	Ambliyara, Betavad, Umrli, Trakuda and Padlava villages of Rajkot District, Guajrat State of India.	10/07/2025 (Remotely through MS Teams)	Mr. Ishan Shrivastava (Lead Auditor, Validator, Technical Expert & GS approved auditor)

Duration of Site visit (Remote): 10/07/2025				
No.	Activity performed during Site visit	Site location	Date	Team member
	project resulted in employment and improves lifestyles of the personal/families in the nearby villages. (Discussion with Stakeholder)			

2.4 Resolution of Clarification and Corrective Action requests

The objective of this phase of the Design Certification Renewal was to resolve the requests for corrective actions and clarification and any other outstanding issues which needs to be clarified for Applus+ Certification positive conclusion on the PDD. The Corrective Action Requests and Clarification Requests raised by Applus+ Certification were resolved during communications between the Client and Applus+ Certification to guarantee the transparency of the validation process, the concerns raised and responses given are summarized in Appendix 1 below.

The final version of Gold Standard GS4GG PDD submitted by PP for renewal of crediting period serves as the basis for the final assessment presented. Additional changes to the GS4GG PDD during the Design Certification Renewal process are not considered to be significant with respect to the main CDM and Gold Standard objectives.

2.5 Internal Quality Control

As a final step for Validation of RCP assessment, the final documentation, including the Validation of RCP Report, has to undergo an internal quality control by the Technical Reviewer(s) to be approved.

Details of the Technical Reviewer(s) are provided within the Validation of RCP Report in Section 2.1. and Appendix 2 for further references of knowledge and capability to conduct the quality checking.

After the Technical Review process, the final documentation may undergo a final quality checking process called Administrative Review, done by the Applus+ Certification's Project Manager and/or Technical Support.

For final approval, the final set of documents are prepared by the VVB's Technical Manager or its deputy and signed by the authorized signatory of the VVB.

In case any of the persons performing this final internal quality, control approval process has acted as a part of the Assessment Team or Technical Review team, the approval can only be given by VVB's authorized personnel who are not part of those teams.

If the final set of documents has been satisfactorily approved by VVB & submitted to PP. A request of renewal of the Crediting Period (GS4GG Design Certification Renewal) is submitted to the GS Registry along with the relevant documents by PP.

3. PROJECT DESIGN CERTIFICATION ASSESSMENT

3.1 Approval

The host country of the project activity is India which is validated from the GS approved PDD available on GS portal. India is the host country. India has ratified the Kyoto Protocol (on 26/12/2002).

3.2 Participation

Powerica Limited is the project proponent from the host party India. The host country involved is parties to the Kyoto Protocol and meet and requirements to participate in the Gold Standard.

3.3 Scale of the project

The project activity is identified as a Large-scale project in section A.4 of the GS4GG PDD applying a Large-scale methodology ACM0002, Version 22.0. The total capacity of the power project is 51.3 MW as validated from the GS4GG approved PD. Since the design capacity of the project activity is more than 15 MW, which is stipulated limit for large scale projects by GS/CDM, the project is correctly classified as large-scale project. Assessment team also checked the requirement of latest applicable methodology ACM0002, Version 22.0 and confirms that the project qualifies the requirement of the latest methodology also (i.e., scale, applicability, baseline, additionality and monitoring).

a) Type of project: The project activity involves electricity generation using wind power to reduce atmospheric CO₂ emission by replacing equivalent amount of electricity from the grid of India. The project type is identified as renewable energy project in section A.4 of the GS4GG PDD. The project activity complies with the requirement of the generation and delivery of energy services (e.g., electricity) from non-fossil and non-deployable energy sources as defined in GS4GG. The project activity generates and supplies renewable electricity to the grid thereby displacing the electricity which would have generated in fossil fuel-based power plants connected to the grid.

General Eligibility Criteria under Renewable Energy Activity Requirements:

Assessment team reviewed the general eligibility criteria under Renewable Energy Activity Requirements, Version 1.4 and found that criteria appropriately provided & justified in the Section A.1.1 of the GS PDD. Through document review and interviews with PP, assessment team conformed that the project activity meets the criteria as the project activity is wind power project registered with GS in host country India with valid version of meth ACM0002 (version 22). Also, assessment team conformed that the project activity is not registered with other GHG schemes referring various registries VCS, GCC, ICR & I-REC etc. The project activity is large scale project and ownership of issued VERs lies with PP only. There is no any new legal requirement came in force in the host country which has impact on the eligibility of the project activity.

Moreover, in accordance with clause 3.1.1 (c) of the GS Principles & Requirements version 2.0, the project area does not overlap with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature, which was confirmed by cross checking the other GHG registries like Clean Development Mechanism (CDM) Registry, VERRA Registry or Global Carbon Council (GCC) and voluntary non-GHG Programs like I-REC etc. Same was found acceptable by the VVB.

3.4 Greenhouse Gases

The project activity leads to displacement of electricity generation from fossil fuel-based power plants connected to the regional grid by renewable energy generated using wind power. The operation of the project activity will result in reduction of carbon-dioxide from the atmosphere due to displacement of electricity in grid by the renewable energy. Hence, the greenhouse gas identified in the PDD is carbon dioxide which is duly validated by the VVB.

The GHG emission sources considered for the project boundary and their explanations are as follows:

Source		GHGs	Included?	Justification/Explanation
Baseline scenario	Grid connected electricity generation.	CO ₂	Yes	Main emission source
		CH ₄	No	Minor emission source
		N ₂ O	No	Minor emission source
Project scenario	Greenfield wind Power Project Activity.	CO ₂	No	No CO ₂ emissions are emitted from the project
		CH ₄	No	Project activity does not emit CH ₄
		N ₂ O	No	Project activity does not emit N ₂ O

3.5 Project timeframe

- **Other certification scheme:** The project activity is registered with GS on 25/08/2022. The project activity has not applied, confirmed by project developer, for any other certification or GHG schemes. Assessment team also checked that the projects are not registered under the International REC (I-REC) registry (<https://evident.services/device-register>) is cross-checked and found that this project is not under I-REC as well. Thus, double counting for the current monitoring period is ruled out.

3.6 Public announcement

Assessment team is in opinion, taking note of the validation report and PDD that the incentive in the form of carbon credits was seriously considered in the decision to proceed with the project activity. The project is registered under GS mechanism⁶.

3.7 Project Boundary

As per ACM0002, Version 22.0 (Latest methodology applied as available on CDM web site) - "The spatial extent of the project boundary includes the project power plant and all power plants connected physically to the electricity system that the GS project power plant is connected to".

⁶ [GSF Registry](#)

The project boundary includes the wind power project, sub-stations, grid and all power plants connected to grid. The project activity will evacuate power to the Indian Grid. Therefore, the entire India's National Grid and all connected power plants have been considered in the project boundary for this GS project activity. The same is checked by the assessment team during review of PP's generation License and found correct.

3.8 Baseline Identification

Being a grid connected Wind energy generation project, PP developed the project based on the Methodology ACM0002, Version 22.0. As per methodology, Version 22.0, Para 24:

First Crediting Period: 06/10/2020 to 05/10/2025 (5 years)

Second Crediting Period: 06/10/2025 to 05/10/2030 (5 years)

If the project activity is the installation of a Greenfield power plant, "The baseline scenario is that the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid".

The project activity involves setting up of wind power projects to harness the power of wind energy to produce electricity and supply to the grid. In the absence of the project activity, the equivalent amount of power would have been supplied by the Indian grid, which is fed mainly by fossil fuel fired plants. In the absence of the project activity, the equivalent amount of power would have been drawn from the Indian grid. Hence, the baseline for the project activity is the equivalent amount of power from the Indian grid. As the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline and pre-project scenario is same.

Methodology Procedure as per the applied Tool 11 for the "Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period (Version 03.0.1)" is as follows:

Step 1: Assess the validity of the current baseline for the next crediting period. The "Procedures for the renewal of the crediting period of a registered CDM project activity" approved by the CDM Executive Board require assessing the impact of new relevant national and/or sectoral policies and circumstances on the baseline.

Step 1.1 (EB 66, Annex 47): Assess compliance of the current baseline with relevant mandatory national and/or sectoral policies : The baseline for the project activity is the electricity delivered to the grid by the project activity which would have otherwise been generated by the operation of grid connected power plants and by the addition of new generation sources into the grid. The project activity is claiming the emission reductions from the net exported electricity to the grid only. In absence of project activity this quantity of electricity would have been generated from the electricity grid mix (mainly fossil fuel). The Government of India enacted the Electricity Act in the year 2003⁷ to harmonize and rationalize the provisions in the then existing laws. The Act consolidated the laws relating to generation, transmission, distribution, trading and use of electricity. With the Enactment of the act, the then existing laws viz, The Indian Electricity Act 1910, The Electricity Supply Act, 1948⁸ and The Electricity Regulatory Commissions Act, 1998

⁷ <https://cercind.gov.in/Act-with-amendment.pdf>

⁸ <https://cercind.gov.in/ElectSupplyAct1948.pdf>

were repealed. The Electricity Act 2003 was in force at the time of the completion of the baseline study during first crediting period.

The baseline remains unchanged for the present crediting period since there is no policy been revised and/or is currently in force as well, therefore the baseline scenario is still in compliance with all the relevant mandatory national and/or sectoral policies.

Step 1.2: Assess the impact of circumstances. The baseline scenario identified at the validation of the project activity was the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid connected power plants and by the addition of new generation sources into the grid. Thus, this project activity was a voluntary investment which intends to replace equivalent amount of electricity at grid from renewable source. PP was not bound to incur this investment; hence absence of project activity (i.e., the investment) does not lead to any continued baseline practice for PP within their scope whereas the continued operation of the project activity would continue to replace equivalent amount of electricity at grid. Hence, the same baseline as identified in the previous crediting period is still valid for the project. Therefore, the assessment of the changes in market characteristics is not required for the renewal of the project's crediting period under GS4GG and There are no new circumstances such as legal, Operational or commercial that can impact the original baseline. The baseline emission factor value is however updated based on the current data available for the grid.

Step 1.3: Assess whether the continuation of the use of current baseline equipment(s) or an investment is the most likely scenario for the crediting period for which renewal is requested.

The project activity started commercial operation on below mentioned dates:

Project Sites	Number of WTGs	Total Capacity (MW)	Date of Commissioning
Powerica Limited	7	18.9	06/10/2020
	3	8.1	07/10/2020
	9	24.3	06/11/2020

since commissioning, the above project activity is running satisfactorily. As per Manufacturer specification and Registered GS4GG PDD, the technical lifetime of project activity is 25 years (As per 1st CP). Thus, the remaining lifetime of equipment's exceeds the crediting period for which renewal is requested. Thus, as per manufacturers information, the remaining lifetime of equipment exceeds crediting period as per option 1 of Tool to determine the remaining lifetime of the Equipment.

The below conditions are fulfilled. (i) The equipment has been operated and maintained according to the recommendations of the equipment supplier; (ii) There are no periodic replacement schedules or scheduled replacement practices specific to the industrial facility, that require early replacement of equipment before the expiry of the technical lifetime; and (iii) The equipment has no design fault or defect and did not have any industrial accident due to which the equipment cannot operate at rated performance levels.

An per option (a), evaluating the remaining lifetime for the type of equipment has been approached and requested to determine the remaining lifetime of the equipment. The assessment of remaining life time of the equipment's had been done and confirmed that the remaining technical lifetime of the equipment of the project activity exceeds the crediting period

for which renewal is requested. As the remaining technical lifetime of the equipment is not less than the end of the crediting period or which renewal is requested, the current baseline holds good for this crediting period too.

Step 1.4: Assessment of the validity of the data and parameters. This step stipulates that "Where emission factors, values or emission benchmarks are used and determined only once for the crediting period, they should be updated, except if the emission factors, values or emission benchmarks are based on the historical situation at the site of the project activity prior to the implementation of the project and cannot be updated because the historical situation does not exist anymore as a result of the CDM project activity." In the context of the present project activity the emission factor has been updated along with the approach used to calculate the emission factor.

Step 2: Update the current baseline and the data and parameters. As evident from the explanation provided above the baseline scenario remains unchanged. Only the approach used to calculate the baseline emission factor is updated as per the latest version of database available at the time of PDD submission for renewal. In line with the para 10.1.4 of GS4GG Validation and Verification Standard version 1.0, the impact of new relevant national and/or sectoral policies and circumstances on the baseline taking into account relevant EB guidance with regard to renewal of the crediting period at the time of requesting renewal of crediting period; and the correctness of the application of an approved baseline methodology for the determination of the continued validity of the baseline or its update, and the estimation of emission reductions for the applicable crediting period.

As per the approved consolidated Methodology ACM0002 Version 22.0 "If the project activity is the installation of a Greenfield power plant, the baseline scenario is electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, as reflected in the combined margin (CM) calculations described in the "Tool 07 : Tool to calculate the emission factor for an electricity system Version 07.0.0".

The project activity involves setting up of wind projects to generate electricity from renewable wind power plant to produce electricity and supply to the grid. In the absence of the project activity, the equivalent amount of power would have been supplied by the Indian grid, which is fed mainly by fossil fuel fired plants. Hence, the baseline for the project activity is the equivalent amount of power from the Indian grid.

The combined margin ($EF_{grid,y}$) is the result of a weighted average of two emission factor pertaining to the electricity system: the operating margin (OM) and build margin (BM). Calculations for this combined margin must be based on data from an official source (where available) and made publicly available. The CEA database version 20.0⁹ was the latest available data at the time of PDD submission to VVB for design certification renewal, hence same has been considered for emission factor calculations.

The project chosen ex-ante default value i.e., Emission Factor.

As per the Guidance given in Tool the emission factor is updated as follows:

- 1) The operating margin is calculated as per the latest version of Baseline CO₂ Emission Database, Version 20.0¹⁰, December 2024 published by Central Electricity Authority (CEA)^{25/}, Government of India available to the project participant. The operating

⁹ [CDM - CO2 Baseline Database - Central Electricity Authority](#)

¹⁰ <https://cea.nic.in/cdm-co2-baseline-database/?lang=en>

margin calculation has been checked by the assessment team and was found to be correct.

- 2) The build margin is considered from latest version of Baseline CO₂ Emission Database, Version 20.0, December 2024 published by Central Electricity Authority (CEA), Government of India available to the project participant, as per CDM Tool 07 "Tool to calculate the emission factor for electricity system" version 07.0.0. The value considered is checked by the assessment team and found correct.
- 3) The combined margin calculation is carried out as per the above-mentioned Tool 07 "Tool to calculate the emission factor for electricity system" version 07.0.0.

The values considered were checked by the assessment team from the above-mentioned sources and were found to be correct.

In the absence of the project activity, the equivalent amount of power would have been drawn from the Indian grid. Hence, the baseline for the project activity is the equivalent amount of power from the Indian grid.

The combined margin ($EF_{grid,CM,y}$) is the result of a weighted average of two emission factor pertaining to the electricity system: the operating margin (OM) and build margin (BM). Calculations for this combined margin must be based on data from an official source (where available) and made publicly available. The CEA database version 20 is the latest available data at the time of PDD submission to VVB for validation, hence same is considered for emission factor calculations.

The combined margin of the Indian grid used for the project activity is as follows:

Parameter	Value	Nomenclature	Source
$EF_{grid,CM,y}$	0.8612 tCO ₂ e/MWh	Combined margin CO ₂ emission factor for the project electricity system in year y	Calculated as the weighted average of the operating margin (0.75) & build margin (0.25) values, sourced from Baseline CO ₂ Emission Database, Version 20.0, December 2024 published by Central Electricity Authority (CEA), Government of India
$EF_{grid,OM,y}$	0.9643 tCO ₂ e/MWh	Operating margin CO ₂ emission factor for the project electricity system in year y	Calculated as the last 3-year (2021-22, 2022-23, 2023-24) generation-weighted average, sourced from Baseline CO ₂ Emission Database, Version 20.0, December 2024 published by Central Electricity Authority (CEA), Government of India
$EF_{grid,BM,y}$	0.5522 tCO ₂ e/MWh	Build margin CO ₂ emission factor for the project electricity system in year y	Baseline CO ₂ Emission Database, Version 20.0, December 2024 published by Central Electricity Authority (CEA), Government of India

Calculation of Baseline Emission

As per the approved consolidated Methodology ACM0002 (Version 22.0) para 57:

Baseline emissions include only CO₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology assumes that all project electricity generation above baseline levels would have been generated by existing grid-

connected power plants and the addition of new grid- connected power plants. The baseline emissions are to be calculated as follows:

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

Where:

BE_y = Baseline emissions in year y (t CO₂/yr)

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

$EF_{grid,CM,y}$ = Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system" (t CO₂/MWh)

As per methodology, combined grid emission factor as per the "Tool to calculate the emission factor for an electricity system" version 07 is calculated as below.

CO₂ Baseline Database for the Indian Power Sector, Version 20, December 2024, published by Central Electricity Authority (CEA), Government of India has been used for the calculation of emission reduction.

As per Methodological tool: Tool to calculate the emission factor for an electricity system (Version 07.0), following six steps have been followed:

- (a) Step 1: Identify the relevant electricity systems;
- (b) Step 2: Choose whether to include off-grid power plants in the project electricity system (optional);
- (c) Step 3: Select a method to determine the operating margin (OM);
- (d) Step 4: Calculate the operating margin emission factor according to the selected method;
- (e) Step 5: Calculate the build margin (BM) emission factor;
- (f) Step 6: Calculate the combined margin (CM) emission factor.

Step 1: Identify the relevant electricity systems

As described in tool "For determining the electricity emission factors, identify the relevant project electricity system. Similarly, identify any connected electricity systems". It also states that "If the DNA of the host country has published a delineation of the project electricity system and connected electricity systems, these delineations should be used". Keeping this into consideration, the Central Electricity Authority (CEA), Government of India has divided the Indian Power Sector into five regional grids viz. Northern, Eastern, Western, North-eastern and Southern.

However, since August 2006, however, all regional grids except the Southern Grid had been integrated and were operating in synchronous mode, i.e. at same frequency. Consequently, the Northern, Eastern, Western and North-Eastern grids were treated as a single grid named as NEWNE grid from FY 2007-08 onwards for the purpose of this CO₂ Baseline Database. As of 31 December 2013, the Southern grid has also been synchronised with the NEWNE grid, hence forming one unified Indian Grid. Since the project supplies electricity to the Indian grid, emissions generated due to the electricity generated by the Indian grid as per CM calculations will serve as the baseline for this project.

Table: Geographical Scope of Indian Electricity Grid

Northern	Eastern	Western	North-Eastern	Southern
Chandigarh	Bihar	Chhattisgarh	Arunachal Pradesh	Andhra Pradesh
Delhi	Jharkhand	Gujarat	Assam	Karnataka
Haryana	Orissa	Daman & Diu	Manipur	Kerala

Himachal Pradesh	West Bengal	Dadar & Nagar Haveli	Meghalaya	Tamil Nadu
Jammu & Kashmir	Sikkim	Madhya Pradesh	Mizoram	Telangana
Punjab	Andaman & Nicobar	Maharashtra	Nagaland	Puducherry
Rajasthan		Goa	Tripura	Lakshadweep
Uttar Pradesh				
Uttarakhand				

Step 2: Choose whether to include off-grid power plants in the project electricity system (optional)

Project participants may choose between the following two options to calculate the operating margin and build margin emission factor:

Option I: Only grid power plants are included in the calculation.

Option II: Both grid power plants and off-grid power plants are included in the calculation. The Project Participant has chosen only grid power plants in the calculation.

Step 3: Select a method to determine the operating margin (OM)

The calculation of the operating margin emission factor ($EF_{grid,OM,y}$) is based on one of the following methods, which are described under Step 4:

- (a) Simple OM; or
- (b) Simple adjusted OM; or
- (c) Dispatch data analysis OM; or
- (d) Average OM.

The data required to calculate Simple adjusted OM and Dispatch data analysis OM is not possible due to lack of availability of data to project developers. The choice of other two options for calculating operating margin emission factor depends on generation of electricity from low-cost/must-run sources. In the context of the methodology low cost/must run resources typically include hydro, geothermal, wind, low-cost biomass, nuclear and solar generation.

Share of Must-Run (Hydro/Nuclear) (% of Net Generation)¹¹

	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
India	15.1%	14.6%	14.3%	14.5%	17.0%	16.5%

The above data clearly shows that the percentage of total grid generation by low-cost/ must-run plants (on the basis of average of five most recent years) for the Indian grid is less than 50% of the total generation. Thus, the Average OM method cannot be applied, as low cost/must run resources constitute less than 50% of total grid generation.

¹¹ https://cea.nic.in/wp-content/uploads/baseline/2024/04/User_Guide_Version_19.0.pdf

The simple OM emission factor is calculated as the generation-weighted average CO₂ emissions per unit net electricity generation (tCO₂/MWh) of all generating power plants serving the system, not including low-cost/must-run power plants/units.

For the simple OM, the simple adjusted OM and the average OM, the emissions factor can be calculated using either of the two following data vintages:

Ex-ante option: If the ex-ante option is chosen, the emission factor is determined once at the validation stage, thus no monitoring and recalculation of the emissions factor during the crediting period is required.

OR

Ex-post option: If the ex-post option is chosen, the emission factor is determined for the year in which the project activity displaces grid electricity, requiring the emissions factor to be updated annually during monitoring.

PP has chosen ex-ante option for calculation of Simple OM emission factor using a 3-year generation-weighted average, based on the most recent data available at the time of submission of the PDD to the VVB for validation.

OM determined at validation stage will be the same throughout the crediting period. There will be no requirement to monitor & recalculate the emission factor during the crediting period.

Step 4: Calculate the operating margin emission factor (EF_{grid, OM Simple,y}) according to the selected method

The operating margin emission factor has been calculated using a 3-year data vintage:

Net Generation in Operating Margin (GWh) (incl. Imports)			
	2021-22	2022-23	2023-24
INDIAN Grid	1,035,672	1,117,846	1,248,868

Simple Operating Margin (tCO ₂ /MWh) (incl. Imports)			
	2021-22	2022-23	2023-24
INDIAN Grid	0.9605	0.9710	0.9615

Weighted Generation Operating Margin	
INDIAN Grid	0.9643

Step 5: Calculate the build margin (BM) emission factor (EF_{grid,BM,y})

As per Methodological tool: "Tool to calculate the emission factor for an electricity system" (Version 07.0, EB 100, Annex 4) para 72:

In terms of vintage of data, project participants can choose between one of the following two options:

(a) **Option 1-** for the first crediting period, calculate the build margin emission factor ex ante based on the most recent information available on units already built for sample group m at the time of PDD submission to the VVB for validation. For the second crediting period, the build margin emission factor should be updated based on the most recent information available on units already built at the time of submission of the request for renewal of the crediting period to the VVB. For the third crediting period, the build margin emission factor calculated for the second crediting period should be used. This option does not require monitoring the emission factor during the crediting period.

(b) **Option 2-** For the first crediting period, the build margin emission factor shall be updated annually, ex post, including those units built up to the year of registration of the project activity or, if information up to the year of registration is not yet available, including those units built up to the latest year for which information is available. For the second crediting period, the build margin emissions factor shall be calculated ex ante, as described in Option 1 above. For the third crediting period, the build margin emission factor calculated for the second crediting period should be used.

Option 1 as described above is chosen by PP to calculate the build margin emission factor for the project activity. BM is calculated ex-ante based on the most recent information available at the time of submission of PD and is fixed for the entire crediting period.

Build Margin (tCO₂/MWh) (not adjusted for imports)	
	2022-23
INDIAN Grid	0.5522

Step 6: Calculate the combined margin (CM) emission factor (EF_{grid,CM,y})

As per Methodological tool: "Tool to calculate the emission factor for an electricity system" (Version 07.0, EB 100, Annex 4) para 81:

The calculation of the combined margin (CM) emission factor (EF_{grid,CM,y}) is based on one of the following methods:

- (a) Weighted average CM; or
- (b) Simplified CM.

PP has chosen option (a) i.e weighted average CM to calculate the combined margin emission factor for the project activity.

The combined margin emissions factor is calculated as follows:

$$EF_{grid,CM,y} = EF_{grid,OM,y} * W_{OM} + EF_{grid,BM,y} * W_{BM}$$

Where:

EF _{grid,BM,y}	=	Build margin CO ₂ emission factor in year y (t CO ₂ /MWh)
EF _{grid,OM,y}	=	Operating margin CO ₂ emission factor in year y (t CO ₂ /MWh)
W _{OM}	=	Weighting of operating margin emissions factor (per cent)
W _{BM}	=	Weighting of build margin emissions factor (per cent)

The following default values should be used for W_{OM} and W_{BM}:

For solar and wind project activities: W_{OM} = 0.75 and W_{BM} = 0.25 (owing to their intermittent and non-dispatchable nature) for the second crediting period and for subsequent crediting periods. Since project activity is of power generation by using solar, the above weightage has been considered for OM and BM.

$$\text{Therefore, } EF_{grid,CM,y} = 0.9643 * 0.75 + 0.5522 * 0.25 \\ = 0.8612 \text{ tCO}_2/\text{MWh}$$

Baseline emission factor (EF_y):

The baseline emission factor is calculated using the combined margin approach as described in Step 6 above:

$$\text{Therefore, } EF_y = EF_{grid,CM,y} = 0.8612 \text{ tCO}_2/\text{MWh}.$$

Assessment team checked the technical parameters of the project equipment's through plant technical specifications shared by PD and as confirmed during remote audit. PD confirms that the details as mentioned in the latest version of GS4GG PDD are correct.

Project Developer has submitted SDG impact tool which was assessed and it was confirmed that the Project will lead to contribution for SDG 07, 08 and 13 and which is found to be appropriate.

Principle 2: Safeguarding Principles

The Safeguarding principles assessment is as below:

SOCIAL SAFEGUARDING PRINCIPLES			
Reference requirement	Question	PD Response	VVB assessment
P.1 Human Rights			
<u>P.1.1.1 </u>	Does the Project Developer, its representatives and the Project respect internationally proclaimed human rights and are they complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of 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	
<u>P.1.1.2 </u>	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	
<u>P.1.1.3 </u>	Is there a risk that rights-holders (e.g., Project-affected stakeholders) do not have the capacity to claim their rights?	☐ YES	
-		☒ NO	
<u>P.1.1.3 </u>	Does this project undermine national or regional measures for the realisation of the right to development?	☐ YES	
-		☒ NO	
<u>P.1.1.1 </u>	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	
<u>P.1.1.2 </u>	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	
<u>P.1.1.3 </u>	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	
<u>P.1.1.3 </u>	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			
<u>P.2.1.1 </u>	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 same was confirmed by the audit team during the review of HR policies Onsite interviews.
-		☒ NO	
-			
<u>P.2.1.2 </u>	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?	☐ YES	
-		☒ NO	
-			
<u>P.2.1.2 </u>		☐ YES	

-	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?	☒ NO	
-			
P.2.1.2	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	☐ YES ☒ NO	
-			
P.2.1.2	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	
-			
P.2.1.3	Has the project assessed gender risks without referencing the country's gender strategy or equivalent national commitment?	☐ YES ☒ NO	
-			
P.2.1.4	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:			
P.2.1.1	adverse impacts on gender equality and/or the situation of women and girls?	☐ YES ☐ POTENTIALLY ☒ NO	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 Onsite interviews.
-			
-			
P.2.1.1	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	
-			
-			
P.2.1.2	reproducing discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	☐ YES ☐ POTENTIALLY ☒ NO	
-			
-			
P.2.1.2	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			

P.4 Cultural Heritage, Indigenous People, Displacement and Resettlement	-	-	
P.4.1 Sites of Cultural and Historical Heritage	-	-	
P.4.1.1 	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 Onsite interview.
-			
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:			
P.4.1.1 		☐ YES ☐ POTENTIALLY ☒ NO	
-	activities adjacent to or within a cultural heritage site?		
-			
P.4.1.1 		☐ YES ☐ POTENTIALLY ☒ NO	
-	significant excavations, demolitions, movement of earth, flooding or other environmental changes?		
-			
P.4.1.1 		☐ YES ☐ POTENTIALLY ☒ NO	
-	alterations to landscapes and natural features with cultural significance?		
-			
P.4.1.1 		☐ YES ☐ POTENTIALLY ☒ NO	
-	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)		
-			
P.4.1.2 		☐ YES ☐ POTENTIALLY ☒ NO	
-	utilization of tangible and/or intangible forms (e.g., practices, traditional knowledge) of Cultural Heritage for commercial or other purposes?		
-			
P.4.1.2 		☐ YES ☒ NO	
-	If answer to question above is "YES" or "POTENTIALLY" - are the communities		

-	made aware of their right under the law, scope and nature of proposed development and its potential consequences?	☐ NA	
P.4.1.3	If answer to question above is "YES" - does the project provide equitable sharing of benefits from commercialization of such knowledge, innovation, or practice, consistent with their customs and traditions?	☐ YES	
-		☒ NO	
-		☐ NA	
P.4.1.4	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	
P.4.1.4	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			
P.4.2 <i>Forced Eviction and Displacement</i>	-	-	
P.4.2.1	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 Onsite interview.
NA			
Would the project potentially involve or lead to:			
P.4.2.1		☐ 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	
-		☐ 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.			
<u>NA</u>			
<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	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 Onsite interview.
-		☒ NO	
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.4.3.1 </u>		☐ YES	

-	impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	☐ POTENTIALLY	
-		☒ NO	
<u>P.4.3.1 </u>	uncertainties with regards to land tenure, access rights, usage rights or land ownership? Examples include, but are not limited to water access rights, community-based property rights and customary rights.	☐ YES	
-		☐ 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.4.3.5 </u>	Have project developer in consultation with stakeholders established a functioning mechanism to receive, process, resolve, communicate and record grievances?	☒ YES ¹²	
-		☐ 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.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 Onsite interview.
-		☒ NO	

¹² For ongoing stakeholder consultation, a grievance register has been placed at the site and the grievances of the Local stakeholders are resolved from time to time.

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 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>	utilization 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 ☐ NO	

	- Did the project obtain free, prior and informed consent from indigenous people before taking their cultural, intellectual, religious, and/or spiritual property?	☒ NA	
<u>P.4.4.6 </u>	- 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.			
<i>NA</i>			
<u>P.5 Corruption</u>	-	-	
<u>P.5.1.1 </u>		☐ YES	

-	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	☒ 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 Onsite interview.
P.5.1.1	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	-	-	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 onsite audit.
P.6.1.1	Does the project involve, facilitate, or condone forced labor, or pose a potential risk of forced labor?	☐ YES ☒ NO	
-			
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 ☒ NO	
P.6.1.5			
P.6.1.7	Does the project have insufficient processes and measures in place to ensure the safety and health of project workers?	☐ YES ☒ NO	
P.6.1.8			
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	
-			

<u>P.6.1.10 </u> - 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.	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
<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>	use of forced labour?	☐ YES
-		☐ POTENTIALLY
-		☒ NO
<u>P.6.1.1 </u>	working conditions that do not meet national labour laws and international commitments?	☐ YES
-		☐ POTENTIALLY
-		☒ NO
<u>P.6.1.1 </u>	working conditions that may deny freedom of association and collective bargaining?	☐ YES
-		☐ POTENTIALLY
-		☒ NO
<u>P.6.1.1 </u>	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.	☐ YES
-		☐ POTENTIALLY
-		☒ NO

P.6.1.1	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.	☐ YES
-		☐ POTENTIALLY
-		☒ NO
P.6.1.1	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	☐ YES
-		☐ POTENTIALLY
-		☒ NO
P.6.1.2	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
P.6.1.2	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
P.6.1.2	harassment, intimidation, and/or exploitation, especially in regard to women?	☐ YES
-		☐ POTENTIALLY
-		☒ NO
P.6.1.3	discriminatory working conditions and/or lack of equal opportunity where national law provides provision to address non-discrimination in employment?	☐ YES
-		☐ POTENTIALLY
-		☒ NO
P.6.1.4	use of child labour? (including third-party engaged workers)	☐ YES
-		☐ POTENTIALLY
-		☒ NO
P.6.1.4	inadequate and verifiable mechanisms for age verification?	☐ YES
-		☒ NO
P.6.1.7	no processes and measures in place for the safety and health of project workers?	☐ YES
-		☒ NO
P.6.1.7	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
P.6.1.7	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	☒ YES
-		☐ NO
P.6.1.8		☒ YES

-	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	☐ NO	
P.6.1.9	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	
P.6.1.10	No grievance mechanism available for workers to voice workplace concerns.	☐ YES	
-		☒ NO	
P.6.1.11	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.6.2.1	Is there a risk of project failure during implementation or after project certification due to a lack of financial resources?	☐ YES	
-		☒ 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.			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 Onsite interview.
NA			
Would the project involve or lead to:			
P.6.2.2	economic impacts (negative/detrimental) to the local economy?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
P.6.2.2	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			
P.7 Climate and Energy	-	-	
P.7.1 GHG Emissions	-	-	
P.7.1.1 	Does the project have a risk of increasing greenhouse gas emissions over the Baseline Scenario?	☐ YES ☒ NO	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 Onsite interview.
-			
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:			
P.7.1.1 	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			
P.7.2 Energy supply	-	-	
P.7.2.1 	Does the project pose a risk to the availability and reliability of energy supply to other users?	☐ YES ☒ NO	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 Onsite interview.
-			
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:			
P.7.2.1 	negative impact on the availability and reliability of energy supply to other users?	☐ 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.8 Water	-	-	
<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	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 Onsite interview.
-			
<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.			
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.			
NA			

<u>P.8.2</u> <u>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 ☒ NO	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 Onsite interview.
-			
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 ☒ NO	
-			
<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>		
<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</u> <u> Environment, ecology and land use</u>	-	-	
<u>P.9.1</u> <u>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 ☒ NO	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 Onsite interview.
-			
<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:			
P.9.1.4	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
P.9.1.4	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			
P.9.2 Vulnerability to Natural Disaster	-	-	
P.9.2.1	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 Onsite 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:			
P.9.2.2	any potential risks that require emergency preparedness and response planning?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
P.9.2.2	if answer to above question "yes" or "potentially", did the project developer disclose appropriate information about emergency preparedness and response to affected communities?	☐ YES	
-		☐ NO	
-		☒ 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.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	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 Onsite interview.
-			
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.9.3.1 </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.			
NA			
<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 ☒ NO	The PD does not identify any risk against the defined principle. The justification provided by the PP was
-			

If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			found acceptable and was confirmed by the audit team during the Onsite interview.
NA			
Would the project involve or lead to:			
P.9.4.1	any potential risk of pollutant release that cannot be avoided?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
P.9.4.3	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	
P.9.4.2	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	
P.9.4.3	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.			
NA			
P.9.5 Hazardous and Non-hazardous Waste	-	-	
P.9.5.1	Does the project involve the generation of waste materials (both hazardous and non-hazardous)?	☒ NO	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 Onsite interview.
-		☐ YES	
P.9.5.3	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	☐ YES	
-		☒ NO	
P.9.5.5	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> - -	If answer to above question is "yes", does project have measures in place to address health risks?	☐ YES ☐ No ☒ NA	
<u>P.9.5.4 </u> - -	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.			
<i>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.</i>			
<i>The waste is disposed to the waste handlers and the firm complies with all the local laws for monitoring and disposal.</i>			
<u>P.9.6 Pesticides & Fertilisers</u>	-	-	
<u>P.9.6.1 </u> -	Does the project involve the use of chemical pesticides?	☐ YES ☒ NO	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 Onsite interview.
<u>P.9.6.5 </u> -	Does the project involve purchase, store, manufacture, trade or use products that fall in Classes IA (extremely hazardous) and IB (highly hazardous)	☐ YES ☒ NO	
<u>P.9.6.6 </u> -	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> - -	chemical pesticides use for pest management?	☐ YES ☐ POTENTIALLY ☒ NO	
<u>P.9.6.4 </u> -	If answer to question above is "yes" or "potentially", does project has	☐ YES ☐ No	

-	documented Chemical Pesticides Policy in place?	☒ NA	
<u>P.9.6.5 </u>	purchase, store, use, manufacture, or trade in Class II (moderately hazardous) pesticides?	☐ YES	
-		☐ POTENTIALLY	
-		☒ NO	
<u>P.9.6.5 </u>	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?	☐ 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.9.7 Harvesting of Forests</u>	-	-	
<u>P.9.7.1 </u>	Does the project have a risk of unsustainable forest management, including timber harvesting?	☐ YES	
-		☒ NO	
-			
<u>P.9.7.1 </u>	Does the project pose a risk of depleting biodiversity and ecosystem functionality in areas where improved forest management is undertaken?	☐ 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 Onsite interview.
-		☒ NO	
-			
<u>P.9.7.1 </u>	Does the project risk not meeting requirements for environment-friendly, socially beneficial, and economically viable plantations using native species whenever possible?	☐ 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			
<u>P.9.8 Food Security</u>	-	-	
<u>P.9.8.1 </u>	Does the project involve the risk of negatively influencing access to and availability of food for people affected?	☐ YES	
-		☒ NO	
-			
If the answer to the 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 Onsite 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 Onsite 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:			
<u>P.9.9.1</u>	animal husbandry or harvesting of fish populations or other aquatic species?[2]	☐ YES	
-		☒ No	
-		☐ NA	
<u>P.9.9.1</u>	limiting access for animals to basic needs like drinking water, adequate food, daylight, appropriate shelter etc.?	☐ YES	
-		☒ POTENTIALLY	
-		☐ NO	
<u>P.9.9.3</u>	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	☐ YES	
-		☒ no	
-		☐ NA	
<u>P.9.9.5</u>	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	☐ YES	
-		☒ No	
-		☐ NA	
<u>P.9.9.6</u>	inadequate measures to ensure that animals are exposed to the least stress possible during transportation and slaughtering?	☐ YES	
-		☐ No	
-		☒ NA	
<u>P.9.9.7</u>	inappropriate spacing per animal and stocking rates per land unit?	☐ YES	
-		☐ No	
-		☒ NA	
<u>P.9.9.8</u>	inadequate measures to address the specific needs of aquatic animals?	☐ YES	
-		☐ No	
-		☒ NA	
<u>P.9.9.9</u> <u>P.9.9.10</u>	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.			
<i>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.</i>			
<u>P.9.10</u> <u>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
-		☒ NO	
<u>P.9.10.2</u>	Does the project in the project area or area of downstream impacts have risks to	☐ YES	

-	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?	☒ NO	confirmed by the audit team during the Onsite interview.
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.9.10.1 </u>		☐ YES	
-	identified habitats as HCV areas and or Critical habitats?	☒ 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>	If the answer to the above question is "yes", will the project have any adverse effects on these areas?	☐ YES	
-		☒ No	
-		☐ NA	
<u>P.9.10.3 </u>	If the answer to above question is "yes", does the project has opportunities to	☐ YES	
-		☒ No	

-	minimise unwarranted conversion or degradation of the habitat and to enhance the habitat as part of its development?	☐ 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	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 Onsite 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.9.11.2 </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.			
NA			
<u>P.9.12 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 Onsite 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.9.12.1 </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			

The safeguarding principles relevant to the project activity are justified by PP based on supporting web links, references wherever applicable.

These safeguarding principles assessment is validated through references given by PP during the remote audit.

- **Principle 3: Stakeholder Inclusivity**

The project is applying for the renewal of the crediting period i.e. Second crediting period from 06/10/2025 to 05/10/2030. Thus, reassessment of stakeholder's inclusivity not required.

As per the CDM/GS requirements, it is necessary to invite the relevant stakeholders, before the validation process starts. A stakeholder consultation meeting was held on 01/12/2019 at the Project site in Village Project site, Village-Umralli, Taluka- Jetpur, District- Rajkot, Gujarat.

All the stakeholders have been invited through Personal invitation and public Invitation letter on 23/11/2019 to attend the stakeholders meeting. The local stakeholders' consultation meeting was attended by local persons including local village administration, local villagers, local vendors and technology suppliers.

The stakeholders identified by the project participant were local villagers who are the major population of the particular area, local communities and gram panchayat (Village head), project proponent representatives, O&M Team and other people involved in the project. Assessment team verified the list of participants who attended the stakeholder meeting and feedback questionnaire and confirms the stakeholders identified are relevant. Assessment team verified the list of participants who attended the stakeholder meeting and feedback questionnaire and confirms the stakeholders identified are relevant. The Assessment team also verified the minutes of meeting to note that no negative comments were received and the same was cross checked with the information obtained during follow up interviews with the stakeholders.

Thus, Assessment team is of the opinion that the stakeholder meeting was adequate and appropriate.

PD has conducted a Stakeholder Feedback Round on 02/09/2021 covering the issues (if any) related to the project activity. The local stakeholders by giving notifications and by placing notices in Project site, Village-Umralli, Taluka- Jetpur, District- Rajkot, Gujarat of all the concerned villages. Similarly, all NGOs were invited by giving them the same notice period so as to facilitate them in attending the meeting. The non-technical summary of the project was prepared in advance and the same has been translated into local language for distribution among stakeholders. The sample of the email was shared with VVB. The email attachment is also checked by the assessment team and found correct. Following observations are made by the VVB:

- Different representative of stakeholders like local villagers, head of panchayat, NGOs, PP employees were invited for their comments via emails during stakeholder's feedback round.
- No negative comments were received and local stakeholders were very satisfied with the project activity implementation and operation in their area same has been verified through the grievance register placed at onsite.
- **Principle 4: Demonstration of real outcomes**

The Sustainable monitoring plan is described below:

SDG Parameter	Indicator	Monitoring
SDG 7 : Affordable and Clean Energy	Quantity of net electricity delivered by the project plant/unit in year y in MWh	Measurement Method: - Electricity produced and supplied to the grid is monitored through energy meter. Net electricity will be calculated by state electricity board and O&M operator on monthly basis and

		provided in the share certificate/monthly report or equivalent. The other parameters used for net electricity supplied to grid are mentioned in monitoring plan. PP has submitted the supporting evidences for generation record and found acceptable to VVB team. QA/QC Process: This parameter is monitored monthly and value of parameter will be cross checked with invoices. The meters will be calibrated on regular frequency.
SDG 8: Decent Work and Economic Growth	Quantitative employment and income generation, Quality of employment	Measurement Method: - Training and employment generation is monitored through training records, staff register or letter from O&M contractor for training and employment details or HSE/HR records same has been verified by VVB team thus acceptable. QA/QC Process: This parameter is based on records, data and no any QA/QC procedure required. The DOE can confirm this parameter with interview with PP or Site in-charge or employees for training
SDG 13: Climate Action	Emission Reductions	Measurement Method: - The emission reduction parameter is calculated as product of net electricity supplied to grid and grid emission factor. The grid emission factor is ex-ante parameter and determined based on data obtained from "CO2 Baseline Database for Indian Power Sector" version 20, published by the Central Electricity Authority, Ministry of Power, Government of India. This is in line with "Tool 07: Tool to calculate the emission factor for an electricity system, version 7" The emission reductions are calculated as per registered PDD and as per methodology requirement verified by VVB team thus acceptable. QA/QC Process: This parameter is calculated, and no any QA/QC procedure required

Principle 5: Financial Additionality & Ongoing Financial Need

The project is registered with GS and this is renewal of crediting period. Thus, demonstration of financial additionality is not required however, PD has demonstrated ongoing financial need.

At the time of registration, the project has demonstrated the additionality for 25 years of life of the project. The project activity has demonstrated the additionality at the time of project registration in GS. The project is justifying the ongoing financial need from the Carbon revenue. Since the commissioning of project, for the project activity arises because of following main reasons as actual O&M cost is higher than the expected values of escalation in O&M charges including salaries of employees & training costs borne by the revenues generated by the project. Also, the cost of Performance review, transition review and Issuance including consultant. the project wouldn't have been able to sustain itself. The project is claiming carbon credits since 06/10/2020 regularly and has been sustaining itself from the carbon revenue generated by the project. Hence, the carbon revenue derived from project activity have been playing an important role in helping project owner in operating the project and contributing to SDGs, e.g providing renewable electricity, employment and decent work and integrating to climate change measures which is found appropriate.

3.9 Calculation algorithm and/or formula used to determine emission reductions

The GS4GG PDD of the project activity is checked by the assessment team and found that ACM0002, Version 22.0 is used for the validation (2nd CP) which is also in line with the GS for Global Goals "Principles and Requirements" Version 2.0 which recommends the application of the latest version of the applied methodology along with the conservative argument of the approach followed. The latest version is ACM0002, Version 22.0 and VVB confirm that the project activity is in line with the latest methodology as well.

The formula used in the GS PDD was used for the calculation of emission reduction and same is found to be correct. Hence emission reduction calculation at this time of validation is conservative and appropriate.

Assessment team checked that Formula used to calculate the net emission reduction for the project activity is

$$ER_Y = BE_Y - PE_Y \text{ (equation no. 17)}$$

Where,

ER_Y = Emission Reduction in tCO₂e

BE_Y = Baseline emission in tCO₂e

PE_Y = Project emissions in tCO₂e

Baseline Emission (BE_Y)

The baseline emissions are the product of electrical energy baseline $EG_{PJ,Y}$ expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.

$$BE_Y = EG_{PJ,Y} \times EF_{grid,CM,Y} \text{ (equation no. 11)}$$

Where,

BE_y	Baseline emissions in year y (t CO ₂ e/)
$EG_{PJ,y}$	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh
$EF_{grid,CM,y}$	Combined margin CO ₂ emission factor for grid connected power generation in year y

$$EG_{PJ,y} = EG_{Facility,y} \text{ (equation no. 12)}$$

Hence,

$$BE_y = 177,302 \text{ MWh} \times 0.8612 \text{ tCO}_2\text{e/MWh} = 152,692 \text{ tCO}_2\text{e/year}$$

$$\text{Since } ER_y = BE_y \text{ (As } PE_y = 0)$$

$$\text{Therefore, } ER_y = 152,692 \text{ tCO}_2\text{/year}$$

SDG 13 Climate Action

Parameter: GHG Emission Reduction

Year	Baseline estimate	Project estimate	Net benefit
06/10/2025 to 05/10/2026	152,692	0	152,692
06/10/2026 to 05/10/2027	152,692	0	152,692
06/10/2027 to 05/10/2028	152,692	0	152,692
06/10/2028 to 05/10/2029	152,692	0	152,692
06/10/2029 to 05/10/2030	152,692	0	152,692
Total	763,460	0	763,460
Total number of crediting years	5		
Annual average over the crediting period	152,692	0	152,692

SDG 7: Affordable and Clean Energy

Parameter: Amount of Clean electricity supplied to grid (MWh)

Year	Baseline estimate	Project estimate	Net benefit
06/10/2025 to 05/10/2026	0	177,302	177,302
06/10/2026 to 05/10/2027	0	177,302	177,302
06/10/2027 to 05/10/2028	0	177,302	177,302

Year	Baseline estimate	Project estimate	Net benefit
06/10/2028 to 05/10/2029	0	177,302	177,302
06/10/2029 to 05/10/2030	0	177,302	177,302
Total	0	886,510	886,510
Total number of crediting years	5		
Annual average over the crediting period	0	177,302	177,302

SDG 8: Decent Work and Economic Growth

Year	Baseline estimate	Project estimate	Net benefit
06/10/2025 to 05/10/2026	0 Training, 0 Jobs	1 Training, 10 Jobs	1 Training, 10 Jobs
06/10/2026 to 05/10/2027	0 Training, 0 Jobs	1 Training, 10 Jobs	1 Training, 10 Jobs
06/10/2027 to 05/10/2028	0 Training, 0 Jobs	1 Training, 10 Jobs	1 Training, 10 Jobs
06/10/2028 to 05/10/2029	0 Training, 0 Jobs	1 Training, 10 Jobs	1 Training, 10 Jobs
06/10/2029 to 05/10/2030	0 Training, 0 Jobs	1 Training, 10 Jobs	1 Training, 10 Jobs
Total	0 Training, 0 Jobs	1 Training, 10 Jobs	1 Training, 10 Jobs
Total number of crediting years	5		
Annual average over the crediting period	0 Training, 0 Jobs	1 Training, 10 Jobs	1 Training, 10 Jobs

4. REFERENCE

S. No.	Document/Evidence/Reference/Web link, Version, Date
1.	GS4GG approved PDD (1 st CP) version 04 dated 25/08/2022
2.	Initial GS4GG PDD, version 01 dated 30/06/2025 GS4GG PDD, version 02 dated 23/07/2025 GS4GG PDD, version 03 dated 12/08/2025 (based on which final opinion was provided for RCP validation) Final GS4GG PDD, version 05 dated 26/09/2025 (based on which final opinion was provided for RCP validation)
3.	Estimated Emission reduction sheet, version 01, 30/06/2025 Estimated Emission reduction sheet, version 02, 30/06/2025 Estimated Emission reduction sheet, version 03, 12/08/2025 Final Estimated Emission reduction sheet, version 04, 14/08/2025 SDG Impact tool submitted by PP
4.	Methodology: ACM0002, Version 22.0
5.	Tools: 1. Tool to calculate the emission factor for an electricity system, Version 7.0 2. Methodological tool TOOL 11 "Assessment of the validity of the original / current baseline and update of the baseline at the renewal of the crediting period." (Version 03.0.1)
6.	GS4GG guideline: • GS4GG Version: GS4GG Principles and Requirements Version 2.0 • GS4GG Activity Requirements: RE Activity Requirements Version 1.4 • GS4GG Version: Validation and Verification Standard Version 2.0 • DESIGN CHANGE REQUIREMENTS, Version 1.1 • Stakeholder Consultation and Engagement Requirements, version 2.1 • Safeguarding Principles and Requirements, version 1.2 • SITE VISIT AND REMOTE AUDIT REQUIREMENTS AND PROCEDURES, Version 2.0 • VALIDATION AND VERIFICATION BY SAME VVB (RU 2020 PR – PR V1.2)

S. No.	Document/Evidence/Reference/Web link, Version, Date
7.	Declaration for non-receiving of ODA for project
8.	Universal declaration of Human Rights https://www.un.org/en/about-us/universal-declaration-of-human-rights
9.	Ministry of Labor: https://labour.gov.in/labour-law-reforms
10.	National Prevention of Corruption Act of Government of India: https://www.indiacode.nic.in/bitstream/123456789/1558/1/A1988-49.pdf
11.	Ministry of Environment, Forest & Climate Change: https://moef.gov.in/moef/index.html
12.	Training Records of project staff at site.
13.	Calibration and testing records of energy meter
14.	Employment attendance, Salary slips and Training Records.
15.	Commissioning Certificate for the WTGs
16.	Technical specification of the WTGs
17.	Invoices
18.	JMR records for the electricity generation from project activity
19.	Grievance Registers copy
20.	Single line diagram of the project activity
21.	Verification Report & Performance Review Document for previous verifications
22.	OFN sheet

5. FINAL PROJECT DESIGN CERTIFICATION RENEWAL STATEMENT

Applus+ Certification have performed a Design Certification Renewal of the "50.6 MW Wind Power Project at Umralli, Gujarat by Powerica Limited". The Design Certification Renewal was performed on the basis of GS4GG Validation and Verification Standard Version 2.0, Gold Standard GS4GG guideline and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The review of the GS4GG PDD and the subsequent follow-up interviews has provided Applus+ Certification with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project meets all relevant UNFCCC and Gold Standard requirements for the Gold Standard and all relevant host country criteria. The project will hence be recommended by Applus+ Certification for renewal of crediting period with the Gold Standard Registry.

By displacing fossil fuel-based electricity with electricity generated from a renewable source, the project results in reductions of CO₂ emissions that are real, measurable and give long-term benefits to the mitigation of climate change. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of annual emission reductions of 152,692 tCO₂e per year and product certified as GS VERs.

The Design Certification Renewal has been performed following the requirements of the latest version of the GS4GG Validation and Verification Standard, Version 2.0, Gold Standard GS4GG guideline and on the basis of the contractual agreement.

In detail the conclusions can be summarized as follows:

- The project does not result in negative social, environmental and/or economic impacts.
- The project contribution to Environment, Social Development and Economic and technological development
- The project additionality is sufficiently justified in the Gold Standard PDD
- The project does not result in diversion of ODA.
- Conservative assumptions were applied in the project description.
- The monitoring plan of SD parameters is transparent and adequate.
- The project meets the stakeholder consultation requirements.

The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the Design Certification Renewal.

Date: 17/10/2025

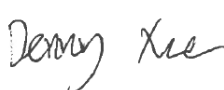
Lead Auditor: Mr. Ishan Shrivastava

Tech. Expert: Mr. Ishan Shrivastava

Tech. Reviewer: Mr. Denny Xue

Approver (*Applus+ Certification VVB Technical Manager*)

Mr. Agustín Calle de Miguel

ASSESSMENT TEAM	
Lead Auditor: Mr. Ishan Shrivastava	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

Corrective Action Request/Clarification Request/Forward Action Request raised during this design renewal certification

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	01
Raised by:	Mr. Ishan Shrivastava	Ref. to checklist in GS4GG PDD:	-
Description of the audit finding	Date: 21/07/2025		
PD requested to submit Design Review for Crediting Period Renewal and previous performance reviews of the project activity.			
Project Participant's response	Date: 23/07/2025		
The Design Review for Crediting Period Renewal and previous performance reviews of the project activity are submitted			
Documentation provided as evidence by Project Participant			
Revised RCP PDD Revised ER sheet OFN worksheet			
Auditor's assessment comment	Date: 06/08/2025		
The assessment team verified that the Project Participant (PP) has submitted the design review document. No open observations were found in the submitted document. As the final verification for the first crediting period is currently ongoing, it was also confirmed that there were no unresolved comments from the second verification round. However, to ensure continuity in the review process, a Forward Action Request (FAR) has been raised for the next VVB to assess the latest performance review and verify whether any new comments are raised in that round. Based on the current verification, this CL is closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	01
Raised by:	Mr. Ishan Shrivastava	Ref. to checklist in GS4GG PDD:	-
Description of the audit finding	Date: 21/07/2025		
PD shall submit following documents to VVB:			
- During document review assessment team found that; PP needs to update the version of applied GS guidelines/rules updates applied and provide weblink for the same. - PD requested to review and provide geo-coordinates in DMS or Degree Decimal format for easy verification.			
Project Participant's response	Date: 23/07/2025		
- version of applied GS guidelines/rules updates applied in revised RCP pdd - geo-coordinates in DMS or Degree Decimal format are now incorporated			
Documentation provided as evidence by Project Participant			
Revised RCP PDD			
Auditor's assessment comment	Date: 06/08/2025		
- The assessment team verified that the PP has updated the tools and methodology in accordance with the registered PDD, and found them to be in line with the latest requirements; therefore, the update is accepted. - The assessment team verified that the PP has updated the geo-coordinates of the project activity, which were found to be consistent with the software, Google Maps, and Google Earth. No discrepancies were observed; therefore, the update is accepted.			
Thus, CAR is closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	02
Raised by:	Mr. Ishan Shrivastava	Ref. to checklist in GS4GG PDD:	-
Description of the audit finding		Date:	21/07/2025
1. During document review it is observed that; commissioning dates of each WTG/phases and their geo-coordinates in DMS/DD format found missing in GS-RCP PD. Kindly update the same. 2. PD requested to maintain the consistency of the SDG parameters throughout PDD.			
Project Participant's response		Date:	23/07/2025
1. Commissioning dates are now consistent as per commissioning certificate 2. consistency done of the SDG parameters throughout PDD			
Documentation provided as evidence by Project Participant			
Commissioning certificates			
Auditor's assessment comment		Date:	06/08/2025
1. Assessment team verified that; PP has submitted the commissioning certificate to the assessment team, and it is found consistent thus found accepted. 2. Assessment team verified that, PP updated the RCP PDD and SDG parameter has been updated throughout the PDD, thus found inline with template requirement guideline. Thus, accepted. Thus, CAR is closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	03
Raised by:	Mr. Ishan Shrivastava	Ref. to checklist in GS4GG PDD:	3.9
Description of the audit finding		Date:	06/08/2025
PD requested to validate and update baseline in-line with the latest host country data and figures. Corrective action sought for the same.			
Project Participant's response		Date:	23/07/2025
baseline is now in-line with the latest host country data and figures			
Documentation provided as evidence by Project Participant			
Revised RCP PDD			
Auditor's assessment comment		Date:	06/08/2025
The assessment team reviewed the revised RCP PDD submitted by the PP. It was confirmed that the baseline has been updated in line with the latest host country data and figures. The update is consistent with available official data sources, and no discrepancies were observed. Thus, accepted CAR is closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	04
Raised by:	Mr. Ishan Shrivastava	Ref. to checklist in GS4GG PDD:	3.9
Description of the audit finding		Date:	21/07/2025
PD requested to review and update the ongoing financial need in-line with as per the relevant requirements set out in paragraphs 4.1.51 to 4.1.53 of Principles and Requirements, V2.1 and submit appropriate evidences.			
Project Participant's response		Date:	23/07/2025
ongoing financial need in-line with as per the relevant requirements is now updated			

Documentation provided as evidence by Project Participant		
Revised RCP PDD and OFN sheet		
Auditor's assessment comment	Date:	06/08/2025
The assessment team verified the revised RCP PDD and OFN sheet provided by the PP. It was observed that the ongoing financial need assessment has been updated in accordance with the requirements outlined in paragraphs 4.1.51 to 4.1.53 of the Principles and Requirements, V2.1. The justification and supporting data are complete and compliant with the standard. Thus, accepted and CAR is closed.		

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	05
Raised by:	Mr. Ishan Shrivastava	Ref. to checklist in GS4GG PDD:	-
Description of the audit finding	Date:	21/07/2025	
1. During document review it is observed that; "Tool to calculate the emission factor for an electricity system" details of the combined margin and built margin is found missing in the RCP PD. Thus, Correction sought. 2. Assessment team found that; due date of meter calibration is found missing. Kindly provide the same.			
Project Participant's response	Date:	23/07/2025	
1. details of the combined margin and built margin is added in the RCP PD 2. Due date of meter calibration is now incorporated			
Documentation provided as evidence by Project Participant			
Revised RCP PDD			
Auditor's assessment comment	Date:	06/08/2025	
1. The details of the combined margin and built margin, as per the "Tool to calculate the emission factor for an electricity system," have been incorporated appropriately. 2. The due date for meter calibration has been added, and the information is consistent with the calibration records. Thus, found accepted and CAR is closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	06
Raised by:	Mr. Ishan Shrivastava	Ref. to checklist in GS4GG PDD:	-
Description of the audit finding		Date:	21/07/2025
PD requested to review and re-assess the Safeguarding assessment for the project activity with appropriate justification and evidences as applicable.			
Project Participant's response		Date:	23/07/2025
The appropriate justification is now been provided for Safeguarding assessment for the project activity			
Documentation provided as evidence by Project Participant			
Revised RCP PDD			
Auditor's assessment comment		Date:	06/08/2025
The assessment team reviewed the revised RCP PDD and confirmed that the Safeguarding assessment has been re-assessed with adequate justification and supporting evidence. The information provided meets the requirements of the applied framework, and no gaps were observed. Thus, accepted and CAR is closed.			

Type:	☐ CAR ☐ CL/CR ☒ FAR	Number:	01
Raised by:	Mr. Ishan Shrivastava	Ref. to checklist in GS4GG PDD:	-
Description of the audit finding	Date:	11/08/2025	

Assessment team found that, the last verification of the project activity is still undergoing, Accordingly, it is recommended that the subsequent VVB review the performance assessment of the previous verification pertaining to the 1 st crediting period and confirm whether all comments or findings raised by Sustain-CERT have been appropriately addressed and closed.		
Project Participant's response	Date:	DD/MM/YYYY
Documentation provided as evidence by Project Participant		
Auditor's assessment comment	Date:	DD/MM/YYYY

Appendix 2: Audit Team CVs

Name	SHORT CV. BACKGROUND INFORMATION
Mr. Ishan Shrivastava	Mr. Ishan Shrivastava, a Bachelor of Engineering in Mechanical Engineering graduate from Rajiv Gandhi Proudhyogiki Vishwavidyalaya, India, brings a year of professional expertise garnered from his tenure at GAIL (India) Limited, one of India's prestigious Maharatna Companies, where he focused on Natural Gas, Energy, and Environmental matters. Currently, he actively associated with True Quality Certifications Pvt. Ltd., (Applus+ Certification's Outsourced Entity) having served as a pivotal team member since 2019. In this capacity, Ishan plays a significant role in supporting Audit teams as Lead Auditor & Technical Expert (TA 1.2 and 3.1), GS approved auditor tasked with validating/verifying Project Activities, encompassing both Renewable and non-Renewable projects, within the framework of CDM/VCS/GS4GG/Bio-Carbon/GCC/ICR programs. His steadfast dedication to this pivotal responsibility underscores his expertise and unwavering commitment to the field Mr. Ishan Shrivastava is based in Indore city, India. Mr. Ishan Shrivastava participates as Lead Auditor and Technical Expert for this project activity.
Mr. Denny Xue	Mr. Denny Xue (Master's Degree in Environmental Engineering, Bachelor's Degree in Thermal Engineering) is an Auditor appointed by Applus+ Certification (LGAI Technological Center, S.A) for the GHG project assessment, auditing and technical review. He has more than 10 years of work experience in CDM/GS4GG/VCS project assessment and technical review with Applus+. Before he joined Applus+ Certification (LGAI Technological Center, S.A), he has been working for Shanghai Chuanji Investment and Management which is a CDM consultancy company as a project manager for CDM project development. Mr. Denny Xue is based in Shanghai, China. Mr. Denny Xue participates as part of the Technical Review Team as Technical Reviewer.

Appendix 3: Energy Meter Details: -

Serial No. & Type	Make	Accuracy Class	Calibration Date
GJ4600A (Main meter)	Secure	0.2 s	07-08-2023
GJ4601A (check meter)	Secure	0.2 s	07-08-2023