

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



**Project Title:** Wind Power Project in Madhya Pradesh by OBWPPL  
**GS project ID:** GS 4962  
**Internal ID:** 12923  
**Customer:** Infinite Environmental solutions LLP  
**Date:** 24/07/2023  
**Revision:** 01.1

SUMMARY			
Reference No.	Date (first version)	Version No.	Date (last version)
A+SH_SYST_TQC_GS_RCP_12923	21/07/2023	01.1	24/07/2023
<b>Client</b>	Infinite Environmental solutions LLP		
<b>Project Title</b>	Wind Power Project in Madhya Pradesh by OBWPPL		
<b>Project Participants</b>	Infinite Environmental solutions LLP		
<b>Project Location</b>	Villages – Jhar, Sandala, Dhanesra, Kamed, district – Ratlam, Madhya Pradesh, India		
<b>Contact Person</b>	Mr. Jimmy Sah		
GS4GG Version: GS4GG, Ver. 1.2 GS4GG Activity Requirements: Renewable Energy Activity Requirements 1.4 Applied Methodology Version: ACM0002, Version 21.0 <a href="#">CDM: Grid-connected electricity generation from renewable sources --- Version 21.0 (unfccc.int)</a> The following tools and guidance have been followed (References): <ul style="list-style-type: none"> <li>• Tool for the demonstration and assessment of additionality<sup>1</sup>, version 07.0.0</li> <li>• Tool to calculate the emission factor for an electricity system<sup>2</sup>, version</li> <li>• Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period<sup>3</sup> – Version 3.0.1</li> </ul>		GS4GG Principles and Requirements V 1.2 UNFCCC CDM Sectoral Scope: 1 GS4GG Scope : 2 Technical Area: 1.2	
Current Methodology Version: ACM0002, Version 21.0			
GS4GG First PDD Version: 01 Date: 20/06/2023		GS4GG Final PDD Version: 05 Date: 21/07/2023	
Estimated Annual Emission Reductions: 101,944 tCO <sub>2</sub> e per year			
Selected Sustainable Development Goals (SDGs): 7; 8; 13			
Estimated Sustainable Development Contributions			
Sustainable Development Goals Targeted	SDG Impact	Estimated Annual Average	Units or Products
SDG 7: Affordable and Clean Energy	MWh of renewable energy generated	109,500	MWh/annum
SDG 8: Decent Work and Economic Growth	Trainings	01	No. of Trainings/annum
	Employees	20	No. of Employees/annum
	Cost spent on O & M	05	Million INR/annum
SDG 13: Climate Action	Emission Reductions	101,944	tCO <sub>2</sub> /Annum (GS VERs)

<sup>1</sup> <http://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf>

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

<sup>3</sup> CDM: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period (unfccc.int)

### Design Certification Summary

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by Infinite Environmental solutions LLP<sup>4</sup> to perform validation for the GS Design Certification Renewal of "Wind Power Project in Madhya Pradesh by OBWPPL" applying the methodology ACM0002, Version 21.0.

The management of Infinite Environmental solutions LLP is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions.

A desk review and a remote audit have been conducted to verify the data submitted in the GS4GG PDD. Applus+ Certification confirms the following have been reviewed:

- a. The GS4GG PDD;
- b. The applied monitoring methodology;
- c. Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board;
- d. The Gold Standard for Global Goals "Principles and Requirements" Version 1.2
- e. All information and references relevant to the project activity's resulting in estimated emission reductions.

The scope of the validation is defined as an independent and objective review of the project design document, against the Kyoto Protocol requirements, UNFCCC rules, applicable CDM requirements 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. site visit, 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 of 04 findings which include:

- 03 Corrective Action Requests (CARs);
- 02 Clarification Requests (CLs/CRs);

NO FAR was raised for current renewal of design certification.

The PP has responded to these findings by modifying the Gold Standard GS4GG PDD and providing adequate additional explanations and evidence. Applus+ Certification confirms that all the findings have been "closed out" before submitting the request for renewal of design certification to the GS board.

As a summary of the validation, 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 requirements of Gold Standard. Therefore, Applus+ Certification recommends the project for renewal of design certification by the GS Registry as GS VER project.

ASSESSMENT TEAM		
Team Members	Type of Resource <sup>5</sup>	Organization (for OEs)
Lead Auditor: Mr. Deepak Pundlik	<input type="checkbox"/> IR <input type="checkbox"/> EI <input checked="" type="checkbox"/> OE	M/s True Quality Certifications Private Limited
Technical Expert/Financial expert: Mr. Pankaj Kumar	<input type="checkbox"/> IR <input type="checkbox"/> EI <input checked="" type="checkbox"/> OE	M/s True Quality Certifications Private Limited
Technical Reviewer: Mr. David Lubanga	<input type="checkbox"/> IR <input checked="" type="checkbox"/> EI <input type="checkbox"/> OE	-

<sup>4</sup> Applus+ Certification has signed a contract with Infinite Environmental solutions LLP who is a project participant. The project promoter is Orange Bercha Wind Power Private Limited

<sup>5</sup> IR (Internal Resource); EI (External Individual); OE (Outsourced Entity)

<b>ABBREVIATIONS</b>	
<b>Applus+ LGAI / Applus+</b>	LGAI Technological Center, S.A. (Applus+ Certification)
<b>BM</b>	Build Margin
<b>CAR</b>	Corrective Action Request
<b>CDM</b>	Clean Development Mechanism
<b>CDM EB</b>	CDM Executive Board
<b>CER</b>	Certified Emission Reduction
<b>CL / CR</b>	Clarification Request
<b>CM</b>	Combined Margin
<b>CMP</b>	Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol
<b>DNA</b>	Designated National Authority
<b>DOE</b>	Designated Operational Entity
<b>EF</b>	Emission Factor
<b>EIA</b>	Environmental Impact Assessment
<b>ER</b>	Emission Reduction
<b>FAR</b>	Forward Action Request
<b>GHG</b>	Greenhouse Gas(es)
<b>GS4GG (or GS)</b>	Gold Standard for Global Goals
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>KP</b>	Kyoto Protocol
<b>MP</b>	Monitoring Plan
<b>NGO</b>	Non-Governmental Organization
<b>OBWPPL</b>	Orange Bercha Wind Power Private Limited
<b>OFN</b>	Ongoing Financial Need
<b>OM</b>	Operational Margin
<b>PD</b>	Project Developer
<b>PP</b>	Project Participant
<b>PS</b>	Project Standard
<b>SDG</b>	Sustainable Development Goal
<b>TAC</b>	Gold Standard Technical Advisory Committee
<b>UNFCCC</b>	United Nations Framework Convention for Climate Change
<b>VVB</b>	Validation and Verification Body
<b>VVS</b>	Validation and Verification Standard
<b>WTG</b>	Wind Turbine Generator

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## 1. INTRODUCTION

M/s. Infinite Environmental solutions LLP has appointed Applus+ Certification to perform a validation for design certification renewal of "Wind Power Project in Madhya Pradesh by OBWPPL"<sup>6</sup> (hereafter referred to as the project activity). This validation report summarises the findings of the validation of the project, performed on the basis of requirement of Gold Standard and 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.

The project activity primarily aims at reducing Greenhouse Gas (GHG) emissions through utilisation of renewable energy technology for generation of electrical energy. The electricity generated from the project activity (approximately 109,500 MWh annually) will displace equivalent electricity generation in grid connected power plants. The project activity will reduce the anthropogenic GHG emissions (approximately 101,944 tCO<sub>2</sub> annually and 509,720 tCO<sub>2</sub> through the crediting period of 5 years) associated with the equivalent amount of electricity generation from grid connected power plants which are predominantly fossil fuel based in the India<sup>7</sup>.

Current project is promoted by Orange Bercha Wind Power Private Limited (OBWPPL) and total installed capacity of the project is 50 MW. This wind energy-based power project consists of 25 numbers of Gamesa G97 Wind Turbine Generators (WTGs) of 2.0 MW capacity each installed in Jhar, Sandla, Dhanesra, Kamed villages in Ratlam district, Madhya Pradesh in India.

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 details of the project and the state of installation are mentioned in the following tables:

Name of the Project Promoter	Capacity (MW)	Connection with Grid	Country	Usage
Orange Bercha Wind Power Private Limited	50 MW	Indian grid	India	Sale to grid

The specific geographical coordinates of the individual WTGs are as follows which were confirmed based on geo-tagged photographs submitted to VVB.

SI. NO.	WTG No	Latitude	Longitude	Tehsil / District	Village	State
1	B 16	52.2298	25.7294	Ratlam	Jhar	Madhya Pradesh
2	B 4	52.3946	25.7375	Ratlam	Sandala	Madhya Pradesh
3	B 1	52.1672	25.7515	Ratlam	Sandala	Madhya Pradesh
4	B 72	52.3437	25.7426	Ratlam	Jhar	Madhya Pradesh
5	B 90	52.5259	25.7525	Ratlam	Jhar	Madhya Pradesh
6	B 92	52.7864	25.7393	Ratlam	Jhar	Madhya Pradesh

<sup>6</sup> <https://registry.goldstandard.org/projects/details/873>

<sup>7</sup> [https://cea.nic.in/wp-content/uploads/installed/2023/06/IC\\_June\\_2023\\_Updated.pdf](https://cea.nic.in/wp-content/uploads/installed/2023/06/IC_June_2023_Updated.pdf)

7	B 89	52.5573	25.7325	Ratlam	Sandala	Madhya Pradesh
8	B 86	52.5976	25.7415	Ratlam	Sandala	Madhya Pradesh
9	B 73	52.8737	25.7434	Ratlam	Sandala	Madhya Pradesh
10	B 79	52.8032	25.7356	Ratlam	Sandala	Madhya Pradesh
11	B 38	52.5999	25.7551	Ratlam	Dhanesra	Madhya Pradesh
12	B 87	52.4506	25.7245	Ratlam	Dhanesra	Madhya Pradesh
13	B 80	52.608	25.737	Ratlam	Dhanesra	Madhya Pradesh
14	B 82	52.7876	25.7563	Ratlam	Dhanesra	Madhya Pradesh
15	B 91	52.608	25.737	Ratlam	Dhanesra	Madhya Pradesh
16	B 33	52.6708	25.7399	Ratlam	Dhanesra	Madhya Pradesh
17	B 71	52.8647	25.7629	Ratlam	Kamed	Madhya Pradesh
18	T1	52.7818	25.7614	Ratlam	Kamed	Madhya Pradesh
19	T2	52.7876	25.7563	Ratlam	Kamed	Madhya Pradesh
20	B 77	52.8648	25.7588	Ratlam	Kamed	Madhya Pradesh
21	B 83	52.8737	25.7434	Ratlam	Kamed	Madhya Pradesh
22	B 78	52.8747	25.7401	Ratlam	Kamed	Madhya Pradesh
23	B 85	52.8032	25.7356	Ratlam	Kamed	Madhya Pradesh
24	B 75	52.7864	25.7393	Ratlam	Kamed	Madhya Pradesh
25	B 84	52.735	25.7416	Ratlam	Kamed	Madhya Pradesh

## 1.1 Objective

The purpose of a validation is to have an independent third-party assessment of the GS4GG PDD 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 renewal of design certification of the project activity rests at the GS and the Parties involved.

## 1.2 Scope

The scope of current validation is defined as an independent and 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 CDM and GS requirements including the approved baseline and monitoring methodology ACM0002, version 21.0. The validation is based on the requirements in the GS4GG Validation and Verification Standard version 01.

The validation is not meant to provide any consulting to 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 01, Gold Standard requirements for GS4GG, applicable CDM methodology, tools and CDM validation and verification standard, version 03. This validation 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. Follow-up interviews with project stakeholders;
3. 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 is referred as audit finding is as below:

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

The Complete List of CARs/CLs/FARs is included as Appendix 1 of this report.

## 2.1 Appointment of the assessment team

According to the sectoral scope/technical area and experience in the sectoral or national business environment, LGAI Technological Center, S.A. (Applus+ Certification) has composed a project assessment team in accordance with the appointment rules in the internal Quality Management System of LGAI Technological Center, S.A. (Applus+ Certification).

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

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

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

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

Name	Role	SS Coverage	TA Coverage	Financial aspect	Host country experience
Mr. Deepak Pundlik	LA/TE	YES	YES	NO	YES
Mr. Pankaj Kumar	A/FE	YES	YES	YES	YES
Mr. David Lubanga	TR	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 PP 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

This is design certification renewal validation. As per clause 3.2.1 of GS site visit and remote audit Requirements and procedures, version 1.0 "A physical site visit by VVB is not mandatory at the validation (Design Certification or Design Certification Renewal) of a project.". Hence, the audit team has conducted remote audit interview corresponding to the PA as follows:

A complete desk review of the PDD as well as all applicable country legal requirements and supportive evidence have been checked by the validation team.

- Validation team has performed online interviews with PP in order to check implementation, current situation, evaluation of data management, QA/QC system, project technology, training provided, monitoring, calibration etc. Interview questions were filled as per Validation team interview checklist. Cross checks between information provided by interviewed personnel (i.e. by checking sources) to ensure that no relevant information has been omitted.
- Validation team has performed interviews with randomly selected local stakeholders to check the monitoring of GS sustainable parameters like employment and training, environmental and other relevant issues.
- Cross-check evaluation, for information received from interviews, under the scope of all information and references provided in the PDD and supporting documents.

Details of interviewees, topics covered and additional information presented below :

Interviewed Personnel	Functions	Organization	Date	Subject
Murali Krishnam Raju M	Assistant General Manager	Orange Bercha Wind Power Private Limited	11/07/2023 (Remote Microsoft team interview)	General aspects of the project, Quality management system, Monitoring data management, Data analysis, Implementation of the project, GHG emission reduction calculation, Involved personnel and responsibilities, Training and practice of the operational personnel, Monitoring data management, Maintenance, Compliance to regulatory requirements, Environmental and social issues, Projects contribution to sustainable development
Rajeev Gupta	Senior Analyst	Infinite Environmental solutions LLP		
Abhishek Mondal	Consultant	Infinite Environmental solutions LLP		
Suraj Malviya	Villager	Local stakeholder		
Samundar Singh	Villager	Local stakeholder		
Meena Rani	Villager	Local stakeholder		
Kuldeep Singh	Villager	Local stakeholder		

Stakeholder's name: Meena Rani
Question: The project is operational for more than 5 years. Did you find any benefit out of the project?
Answer: It has led to employment generation for the local villagers and have helped to alleviate their standard. The project developer has conducted training camps for the local peoples.

Stakeholder's name: Kuldeep Singh
Question: Do you think wind farms are good for environment and local community? Have you observed any ill effects due to the project?

Answer: The wind farm has no impact on soil, water and air in our region. It is good project as it is renewable energy project. The project has provided jobs to local people.

## **2.4 Resolution of Clarification and Corrective Action requests**

The objective of this phase of the validation is to resolve the requests for corrective actions and clarification and any other outstanding issues which need 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 most recent GS4GG PDD serves as the basis for the final assessment presented.

## **2.5 Internal Quality Control**

As the final step of a validation the final documentation including the validation report and the protocol have to undergo an internal quality control by the technical review committee. Each report has to be finally approved either by the head of the technical review committee or the deputy. In case one of these two persons is part of the audit team, approval can only be given by the other one.

After confirmation of the PP, the validation opinion and relevant documents are submitted to the GS Registry.

## **3. PROJECT DESIGN CERTIFICATION ASSESSMENT**

### **3.1 Approval**

This section is not applicable as this is a GS VER project.

### **3.2 Participation**

M/s Orange Bercha Wind Power Private Limited is the project developer and M/s Infinite Environmental solutions LLP is the project representative from the host party - India. The host country involved is a party to the Kyoto Protocol and meets 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.6 of the GS4GG PDD applying a Large-scale methodology ACM0002, Version 21.0. The total capacity of the power project is 50 MW as validated from the submitted power purchase agreement and WTG commissioning certificates. Since the design capacity of the project activity is more than 15 MW, which is a 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 21.0 and confirmed 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 CO<sub>2</sub> emission by replacing equivalent amounts of electricity from the grid of India. The project type is identified as a renewable energy project in section A.6 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 electricity grid thereby displacing the electricity which would have generated in most probable case by fossil fuel-based power plants connected to the grid<sup>8</sup>.

### 3.4 Greenhouse Gases

The project activity leads to displacement of electricity generation from fossil fuel-based power plants connected to the Indian electricity 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 the grid by 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		Gas	Included ?	Justification/Explanation
<b>Baseline</b>	Grid connected electricity generation	CO <sub>2</sub>	Yes	Main emission source
		CH <sub>4</sub>	No	Minor emission source
		N <sub>2</sub> O	No	Minor emission source
		Other	No	No other emissions are emitted from the project
<b>Project</b>	Greenfield Wind Power Project Activity	CO <sub>2</sub>	No	No CO <sub>2</sub> emissions are emitted from the project
		CH <sub>4</sub>	No	Project activity does not emit CH <sub>4</sub>
		N <sub>2</sub> O	No	Project activity does not emit N <sub>2</sub> O
		Other	No	Project activity does not emit other forms of GHG emissions

### 3.5 Project timeframe

**Other certification scheme:** The project activity has not applied, confirmed by project developer, for any other certification like Green or White certification. Therefore, the validation team concluded that the project activity meets the applicability criteria of Gold Standard. The project is applied for GSVER retroactive validation. During validation, PD confirmed that this Project is solely developed as a standalone GS VER Project and submitted a declaration that there will not be double accounting of emission reduction for the project activity.

<sup>8</sup> [https://cea.nic.in/wp-content/uploads/installed/2023/06/IC\\_June\\_2023\\_Updated.pdf](https://cea.nic.in/wp-content/uploads/installed/2023/06/IC_June_2023_Updated.pdf)

### 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 mechanism<sup>9</sup>.

### 3.7 Project Boundary

As per ACM0002, Version 21.0 i.e. latest version of methodology applied as available on CDM website - "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". The project boundary includes the wind power project, sub-station, electricity grid and all power plants connected to the grid. The project activity will evacuate power to the Indian electricity grid. Therefore, the entire electricity grid and all connected power plants have been considered in the project boundary for the current GS project activity. The same is found appropriate by the assessment team during the remote validation audit and found correct.

### 3.8 Baseline Identification

Being a grid connected large scale wind energy generation project, PP developed the project based on the Methodology ACM0002, Version 21.0. As per the methodology: "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 to calculate the emission factor for an electricity system".

The project activity involves setting up of wind energy 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 local electricity 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 grid. Hence, the baseline for the project activity is the equivalent amount of power from the electricity grid. As the project activity is the installation of a new grid-connected renewable power plant/unit, the baseline and pre-project scenario is the same.

The combined margin ( $EF_{grid,CM,y}$ ) is the result of a weighted average of two emission factors 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. Government of India through Central Electricity Authority (CEA) publishes database containing the necessary data on CO<sub>2</sub> emissions for all grid-connected power stations in India. PP has used the latest version of CEA database i. e version 18<sup>10</sup> published in December, 2022.

<sup>9</sup> <https://registry.goldstandard.org/projects/details/873>

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

The values for the parameters were calculated as below based on the CEA database :

Parameter	Value	Nomenclature	Source
$EF_{grid,CM,y}$	0.9310 tCO <sub>2</sub> /MWh	Combined margin CO <sub>2</sub> emission factor for the project electricity system in year y	Calculated as the weighted average of the operating margin (0.25) & build margin (0.75) values, sourced from published by Central Electricity Authority (CEA), Government of India
$EF_{grid,OM,y}$	0.9518 tCO <sub>2</sub> /MWh	Operating margin CO <sub>2</sub> emission factor for the project electricity system in year y	Calculated as the last 3-year (2019-20, 2020-21 and 2021-22) generation-weighted average, sourced from Baseline CO <sub>2</sub> Emission Database, Version 18.0, December 2022 published by Central Electricity Authority (CEA), Government of India
$EF_{grid,BM,y}$	0.8687 tCO <sub>2</sub> /MWh	Build margin CO <sub>2</sub> emission factor for the project electricity system in year y	The value for the most recent year i. e. 2021-22 sourced from Baseline CO <sub>2</sub> Emission Database, Version 18.0, December 2022 published by Central Electricity Authority (CEA), Government of India

### 3.9 Eligibility Principles Assessment

#### Principle 1. Contribution to Climate Security & Sustainable Development

The baseline scenario and the emission reduction calculations have been performed as per the PDD. The emission factor of the grid, in the GS PDD, has been calculated in-line with the provisions of applied methodology ACM0002, Version 21.0. The latest applicable version of "Tool to calculate the emission factor for an electricity system" is version 07 which is used for calculation of emission factor which is found appropriate.

The applicability criteria of ACM0002, version 21.0 is detailed out as below which was assessed and confirmed by VVB:

Applicability 1: Assessment team checked that the project activity is installation of a new grid connected wind power plant/ unit at a site where no renewable power plant was operated prior to the implementation of the project activity (Greenfield plant) and hence this criterion is applicable.

Applicability 2: Assessment team checked that the project activity is an installation of a new grid connected wind power plant/ unit and hence a criterion under point (a) is met. The project does not involve any capacity additions, retrofits or replacements and therefore this criterion under point (b) is not applicable.

Applicability 3: Assessment team checked that the project activity is an installation of a new grid connected wind power plant/ unit and not Hydro power plant, therefore this criterion is not applicable for this project activity.

Applicability 4: Assessment team checked that the project activity is an installation of a new grid connected wind power plant/ unit and not Hydro power plant, therefore this criterion is not applicable for this project activity.

Applicability 5: Assessment team checked that the project activity is installation of a new grid connected wind power project/ unit and does not involve switching from fossil fuel to renewable energy, therefore criterion described in point (a) is not relevant to the project activity.

This is a wind power plant/ unit and not a biomass fired plant, therefore criterion described in point (b) is not applicable to the project activity

Applicability 6: Assessment team checked that the project activity is a new grid connected wind power plant/ unit and not a retrofit, replacement or capacity additions and therefore this criterion is not applicable to the project activity.

Applus+ Certification confirms that the application of the baseline methodology is transparent and conservative and confirms that the chosen baseline and monitoring methodology i.e. ACM0002, version 21.0 is applicable to the project activity.

#### **Applicability conditions of "Tool to calculate the emission factor for an electricity system"**

- OM, BM and CM are estimated using the tool under section B.6.1 of the PDD for calculating baseline emissions.
- The project activity is grid connected and thus emission factor is calculated and thus OM, BM and CM are estimated using the tool under section B.6.1 of the PDD for calculating baseline emissions.
- The project activity is located in India, a non-Annex I country. Therefore, this criterion is not applicable for the project activity.
- The project activity is a grid connected wind power project and not a hydro power plant. Therefore, this criterion is not applicable for the project activity.

Assessment team referred Methodological tool - 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 and CDM validation and verification standard for project activities, version 03 to check the originality of the baseline. Following are the observation of the assessment team regarding selected baseline for the project activity in this present 2<sup>nd</sup> renewable crediting period:

#### 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).

Ministry of Power, Government of India has published installed generation capacity at <https://powermin.gov.in/en/content/power-sector-glance-all-india>. The database mentions that fossil fuel is the main source of energy generation with total installed capacity at 56.80%. Renewable energy sources account for 41.40% of which wind capacity is only 10.30%. Thus, the identified baseline of fossil fuel plant dominates the electricity generation units and the baseline remains unchanged for the present (2<sup>nd</sup>) 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 (EB 66, Annex 47) : Assess the impact of circumstances

There are no new circumstances that can impact the original baseline. The baseline emission factor value is however updated based on the current data available for the grid by PP which is found appropriate.

Step 1.3 (EB 66, Annex 47): 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

As per the “Tool to determine the remaining lifetime of equipment”, the remaining lifetime of the equipment is the time for which the existing equipment can continue to operate before it has to be replaced/discarded. As per this Tool, Project participant can use one of the following options to determine the remaining lifetime of the equipment:

- (a) Use manufacturer’s information on the technical lifetime of equipment and compare to the date of first commissioning;
- (b) Obtain an expert evaluation;
- (c) Use default value

The project activity started commercial operation on 05/05/2016 and since commissioning, the project activity is running satisfactorily. As per Manufacturer specification and Registered GS PDD, the technical lifetime of power plant is 20 years (As per 1<sup>st</sup> 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 is exceeding crediting period as per option 1 of Tool to determine the remaining lifetime of the Equipment.

VVB confirmed that 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.

As 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 (EB 66, Annex 47): 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.”

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:

- The operating margin is calculated as per the CEA database, version 18.0 Government of India and the requirements of “Tool to calculate the emission factor for electricity system” version 07. The operating margin calculation is checked by the assessment team and found correct.
- The build margin is considered as per the CEA database, version 18.0 Government of India and the requirements of “Tool to calculate the emission factor for electricity system” version 07. The value considered is checked by the assessment team and found correct.
- The Combined margin calculation is carried out as per “Tool to calculate the emission factor for electricity system” version 07. The value considered is checked by the assessment team and found correct.

The emission factor is fixed ex-ante and thus will be used for the complete 2<sup>nd</sup> renewable crediting period and for entire verification conducted under 2<sup>nd</sup> renewable crediting period.

**Application of Steps 1.1, 1.2, 1.3 and 1.4 confirmed that the current baseline is valid for the Second crediting period but data and parameters need to be updated.**

**Therefore, step 2 is applied**

**Step 2.1: Update the current baseline**

This step is applicable since the Steps 1.1, 1.2, 1.3 and/or 1.4 showed that the current baseline needs to be updated. As evident from the explanation provided above the baseline scenario remains unchanged.

Updated the baseline emissions based on the latest approved version of the methodology applicable to the project activity for the subsequent crediting period, without reassessing the baseline scenario.

**Step 2.2: Update the data and parameters**

The updated Data and/or parameter are followed for estimating the baseline emissions

Hence as per ACM0002, version 21.0 (latest Methodology), the baseline of the project is as follows:

*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 to calculate the emission factor for an electricity system".*

The above selected baseline is correct and thus applicable to the project activity and in line with approved methodology for the applied renewable of crediting period.

The Republic of India is the host country. India has recently ratified the Kyoto Protocol (on 5 February of 2009). Indian National Focal Point to the UNFCCC is the Ministry of Environment, Forest and Climate Change. Thus the project's contribution towards sustainable development has been addressed based on the following sustainable development aspects:

**I. Social well-being:**

The project activity provides job opportunities to local people during erection, commissioning and maintenance of the wind machines. Frequency of visiting villages and nearby areas by skilled, technical and industrialists increase due to installation /site visit/operation and maintenance work related to WTGs. This directly and indirectly positively affects the economy of villages and nearby areas.

**II. Economic well-being:**

The GS project activity generates permanent and temporary employment opportunities within the vicinity of the project. The electricity supply in the nearby area improves which directly and indirectly improves the economy and lifestyle of the area.

**III. Environmental well-being:**

The wind power is one of the cleanest renewable energy powers and does not involve any fossil fuel. There are no GHG emissions. The impact on land, water, air and soil is negligible. Thus, the project activity contributes to environmental well-being without causing any negative impact on the surrounding environment.

**IV. Technological well-being:**

The project activity is a step forward in harnessing the untapped wind potential and further diffusion of the wind technology in the region. The project activity leads to the promotion and demonstrates the success of wind projects in the region which further motivate more investors to invest in such projects. Hence, the project activity leads to technological well-being.

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

The project aims to harness wind energy through installation of 25 wind turbines of Gamesa G97 Wind Turbine Generators (WTGs) of 2.0 MW capacities each.

The technical details of the plant were confirmed through a technical datasheet from the manufacturer and are as follows:

<b>Gamesa G-97</b>	
Rated power	2000 kW
Average Annual Wind speed	7.5 m/s
Turbulence Intensity I15%	18 m/s
Reference 10-minute wind speed for 50 years	37.5 m/s
Survival wind speed	52.5 m/s
<b>POWER</b>	
Rated power	2000 kW
Average Annual Wind speed	7.5 m/s
Turbulence Intensity I15%	18 m/s
Reference 10-minute wind speed for 50 years	37.5 m/s
Survival wind speed	52.5 m/s
<b>GENERATOR</b>	
Type	Doubly-fed with coil rotors and slip rings
Rated power	2.0 MW
Voltage	690 V AC
Frequency	50Hz/60Hz
Protection class	IP 54
Power Factor	0.95 CAP – 0.95 IND throughout the power range
<b>ROTOR</b>	
Diameter	97 m
Swept area	7390 sq.m
Speed range (variable)	9:19 rpm
<b>TOWER AND FOUNDATION</b>	
Hub height	104 m
Design	Tubular, Four sections
Foundation type	Floating foundation
<b>GEAR BOX</b>	
Type	1 Planetary stage & 2 Parallel stage
Ratio	1:106.8 (50 Hz), 1:127.2 (60 Hz)
<b>TOWER AND FOUNDATION</b>	
Hub height	104 m
Design	Tubular, Four sections

Foundation type	Floating foundation
<b>GEAR BOX</b>	
Type	1 Planetary stage & 2 Parallel stage
Ratio	1:106.8 (50 Hz), 1:127.2 (60 Hz)

## Principle 2: Safeguarding Principles

The Safeguarding principles assessment is provided in appendix 4.

The safeguarding principles relevant to the project activity are justified by PD based on supporting web links and references wherever applicable. These safeguarding principles assessment is validated through references given by PD, during the remote audit.

## Sustainable Development Goals

The SDG goals are also described below:

SDG Goal	Assessment of Methodological choices/approaches for estimating the SDG outcome
<p><b>SDG 7 – Affordable and Clean Energy:</b> Ensure access to affordable, reliable, sustainable and modern energy for all</p>	<p><b>Measurement Method:</b> Electricity produced and supplied to the grid is monitored through energy meters. Net electricity generated is obtained from the monthly Statement of net export of power to the grid at the plant site. The other parameters used for net electricity supplied to the grid are mentioned in the monitoring plan. The O&amp;M site-in-charge shall be responsible for the regular recording of data.</p> <p><b>QA/QC Process:</b> This parameter is monitored monthly and the value of the parameter will be cross checked with the invoices. The meters will be calibrated on regular frequency.</p> <p><b>Relevant SDG Target:</b> 7.2 - By 2030, increase substantially the share of renewable energy in the global energy mix.</p> <p><b>Corresponding indicator:</b> Electricity produced and supplied to the grid. (7.2.1 Renewable energy share in the total final energy consumption)</p>
<p><b>SDG 8 – Decent Work and Economic Growth:</b> Promote inclusive and sustainable economic growth, employment and decent work for all</p>	<p><b>1. Quantitative employment</b>  <b>2. Quality of employment</b>  <b>Measurement Method:</b> Training and employment generation is monitored through training records; staff register or letter from O&amp;M contractor for training and employment details or HSE/HR records.</p> <p><b>QA/QC Process:</b> The number of persons employed would be mentioned in the plant register, which can be cross-checked with</p>

	<p>daily attendance register, employee records, salary slips of employee or letter from O&amp;M contractor for number of people employed.</p> <p><b>Relevant SDG Target:</b> 8.5.1 - By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value</p> <p><b>Corresponding indicator:</b> 1) No. of trainings provided to the employees and O&amp;M staff: 01 training will be provided/year, and          2) No. of employment provided due to project activity: 20 persons/year.          3) cost spent on operation and maintenance: 5 million INR/ year</p>
<p><b>SDG 13 – Climate Action</b> : Take urgent action to combat climate change and its impacts</p>	<p><b>Measurement Method:</b> - The emission reduction parameter is calculated as a 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 India National Network Grid Emission Factor Data Sheet of Ministry of Energy and Natural Resources<sup>11</sup>. This is in line with "Tool to calculate the emission factor for an electricity system, version 7".</p> <p>The emission reductions are calculated as per registered PDD and as per methodology requirement.</p> <p><b>QA/QC Process:</b> This parameter is calculated, and no QA/QC procedure required.</p> <p><b>Relevant SDG Target:</b> 13.2.1: Integrate climate change measures into national policies, strategies and planning</p> <p><b>Corresponding indicator:</b> Emission reductions in tCO<sub>2e</sub> from the project activity.</p>

PP has submitted SDG impact tool which was checked and found okay. PP has correctly mentioned all the above SDGs and its details which were checked and found correct.

**Principle 3: Stakeholder Inclusivity**

The project is applying for the renewal of the crediting period i.e. Second crediting period from 05/05/2023 to 04/05/2028. Thus, reassessment of stakeholder’s inclusivity not required. However, VVB ensured that ongoing stakeholder consultation through grievance register is being maintained by PD.

**Principle 4: Demonstration of real outcomes**

The Sustainable monitoring plan is described below:

<sup>11</sup> <https://enerji.gov.tr/evced-cevre-ve-iklim-turkiye-ulusal-elektrik-sebekesi-emisyon-faktoru>

SDG Parameter	Indicator	Monitoring															
<p><b>SDG 7 : Affordable and Clean Energy</b></p>	<p>Quantity of net electricity delivered by the project plant/unit in MWh</p>	<p>The available parameter to Project Developer is net electricity supplied to grid and same is mentioned as monitoring parameter. The net electricity generation is calculated based on Export, import values from the meters connected at the sub-station. The Net electricity is thus calculated based on the values of export and import for the particular billing month. Quantity of net electricity supplied to the grid will be cross checked from the invoices raised by the project proponent.</p> <p>The energy meters used are tri-vector meters which are of accuracy class 0.2. The calculation of net electricity supplied to the grid is under purview of the state electricity board and the Project owner does not have control on it.</p> <p>The onsite practice is thus acceptable to the assessment team as the same is as per the requirement of the approved methodology.</p> <p>The details of the energy meters to be used are provided below which were confirmed against the supporting documents.</p> <table border="1" data-bbox="837 1377 1380 1590"> <thead> <tr> <th></th> <th>Main Meter</th> <th>Spare Meter</th> </tr> </thead> <tbody> <tr> <td>Serial number</td> <td>XC576471</td> <td>XC576472</td> </tr> <tr> <td>Accuracy class</td> <td>0.2</td> <td>0.2</td> </tr> <tr> <td>Test date</td> <td>11/10/2019</td> <td>11/10/2019</td> </tr> <tr> <td>Calibration due date</td> <td>10/10/2024</td> <td>10/10/2024</td> </tr> </tbody> </table>		Main Meter	Spare Meter	Serial number	XC576471	XC576472	Accuracy class	0.2	0.2	Test date	11/10/2019	11/10/2019	Calibration due date	10/10/2024	10/10/2024
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Accuracy class	0.2	0.2															
Test date	11/10/2019	11/10/2019															
Calibration due date	10/10/2024	10/10/2024															
<p><b>SDG 8 : Decent Work and Economic Growth</b></p>	<p>Quantitative employment and income generation</p>	<p>The Project participant has documentation pertaining to employment, attendance register and documentary details of training/capacity building along with O &amp;M expenses. Assessment team also checked the salary slips and confirmed that due to project activity people are getting more than minimum wages as a salary and this salary is better than local level salary. Based on the roles and responsibility of the employee, the salary will</p>															

		be higher than the minimum salary of the region and hence the parameter monitoring is acceptable to the assessment team.
<b>SDG 8 : Decent Work and Economic Growth</b>	Quality of employment	<p>The training records are maintained on a regular basis with annual consolidation. Assessment team checked that at least 10 people are expected to be employed at site during the crediting period. The employment opportunities generated are local or temporary or permanent as checked and confirmed by the assessment team.</p> <p>The training related to O&amp;M, Safety, emergency procedure, fire safety etc. are provided to employees. Since local people are employed due to project activity, the training given to employees improves the quality of employment. As the parameter is subjected to monitoring the same will be checked during the verification of the project activity.</p> <p>It will ensure that safe working conditions and safety equipment has been provided for all skilled and unskilled Labour. It will be checked during verification through site visit observations and interview with people if noise level is maintained within permissible limit.</p> <p>Safety equipment to be provided to workers both skilled and unskilled will be checked during the verification of the project activity. Assessment team however checked that the same is already provided to the workers as part of the company's policy.</p>
	Operation and Maintenance (O & M) cost	PD has expected that they will spent 5 million INR/year on O & M. Assessment team during remote interview checked and confirmed that the expected expenses for O &M are valid.
<b>SDG 13: Climate Action</b>	Emission Reductions	The emission reduction calculation will be done as per the formula mentioned in the GS4GG PDD. As the parameter is subjected to monitoring the same will be checked during the verification of the project activity.

**Principle 5: Financial Additionality & Ongoing Financial Need**

The additionality of the project activity has been demonstrated in-line with “Tool for the demonstration and assessment of additionality”, Version 07.0. All steps of the additionality tool have been demonstrated in the GS PDD and validation report.

The project activity is already registered with the GS and additionality of project already demonstrated in registered PDD (<https://registry.goldstandard.org/projects/details/873>), found the same to be correct and appropriate.

The project is operational from date of commissioning and is claiming VER revenue too for the same. As confirmed during interviews with PP and supporting documents, PP has used VER revenue towards O&M cost, training and consulting expenses along with VVB expenses and GS4GG related expenses. It is evident from the submitted documents and registered GS PDD that the project has low IRR and income from GS certification proves useful. PP has taken a bank loan for the project and income from GS certification is used to repay the same too.

Based on the actual generation from project activity, VVB noted that average annual PLF value is 25.65%. With this PLF value, the project is still additional. Since, PLF is the only parameter which affects the financial inclusiveness of the project in post commissioning period (as O&M cost is not zero, will not impact), VVB noted that the project still needs VER revenue.

VVB has accessed the provided information and found it accurate, correct and suitable for OFN demonstration.

VVB is of the opinion that the finance derived from Gold Standard certification is material for the project to the ongoing sustainability of the registered project. Since the carbon finance is found to be good resource for project continuation, ongoing financial need is found justified.

### **3.10 Calculation algorithm and/or formula used to determine emission reductions**

The GS4GG PDD of the project activity was checked by the assessment team and found that ACM0002, Version 21.0 is used which is the latest version of the methodology by UNFCCC. As the GS tool kit 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 21.0 and VVB confirm that the project activity is in line with the latest version of methodology.

The formula used in the GS4GG PDD was used for the calculation of emission reduction and the 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

$$ER_Y = BE_Y - PE_Y$$

Where,

ER<sub>Y</sub> = Emission Reduction in tCO<sub>2</sub>/year

BE<sub>Y</sub> = Baseline emission in tCO<sub>2</sub>/year

PE<sub>y</sub> = Project emissions in tCO<sub>2</sub>/year

**Baseline Emission (BE<sub>y</sub>)**

The baseline emissions are the product of electrical energy baseline EG<sub>PJ,y</sub> expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor.

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

Where,

- EG<sub>PJ,y</sub> = Total quantity of net electricity delivered to the Indian grid
  - EF<sub>grid,CM,y</sub> = Combined margin CO<sub>2</sub> emission factor for grid connected power generation in year y
- = 0.9310 tCO<sub>2</sub>e/MWh

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

$$BE_y = 109,500 \text{ MWh} * 0.9310 = 101,944 \text{ tCO}_2/\text{year (round down to nearest integer)}$$

Since ER<sub>y</sub> = BE<sub>y</sub> (As PE<sub>y</sub>=0)

Therefore, ER<sub>y</sub> = 101,944 tCO<sub>2</sub>/year

**SDG 13 Climate Actions**

Year	Baseline estimate	Project estimate	Net benefit
Year 1	101,944 tCO <sub>2</sub>	0 tCO <sub>2</sub>	101,944 tCO <sub>2</sub>
Year 2	101,944 tCO <sub>2</sub>	0 tCO <sub>2</sub>	101,944 tCO <sub>2</sub>
Year 3	101,944 tCO <sub>2</sub>	0 tCO <sub>2</sub>	101,944 tCO <sub>2</sub>
Year 4	101,944 tCO <sub>2</sub>	0 tCO <sub>2</sub>	101,944 tCO <sub>2</sub>
Year 5	101,944 tCO <sub>2</sub>	0 tCO <sub>2</sub>	101,944 tCO <sub>2</sub>
Year 6	101,944 tCO <sub>2</sub>	0 tCO <sub>2</sub>	101,944 tCO <sub>2</sub>
Year 7	101,944 tCO <sub>2</sub>	0 tCO <sub>2</sub>	101,944 tCO <sub>2</sub>
<b>Total</b>	<b>509,720 tCO<sub>2</sub></b>	<b>0 tCO<sub>2</sub></b>	<b>509,720 tCO<sub>2</sub></b>
<b>Total number of crediting years</b>	7 years		
<b>Annual average over the crediting period</b>	<b>101,944 tCO<sub>2</sub></b>	<b>0 tCO<sub>2</sub></b>	<b>101,944 tCO<sub>2</sub></b>

**SDG 7: Affordable and Clean Energy**

Year	Baseline estimate	Project estimate	Net benefit
Year 1	0 MWh	109,500 MWh	109,500 MWh

Year 2	0 MWh	109,500 MWh	109,500 MWh
Year 3	0 MWh	109,500 MWh	109,500 MWh
Year 4	0 MWh	109,500 MWh	109,500 MWh
Year 5	0 MWh	109,500 MWh	109,500 MWh
Year 6	0 MWh	109,500 MWh	109,500 MWh
Year 7	<b>0 MWh</b>	<b>2,520,000 MWh</b>	<b>2,520,000 MWh</b>
<b>Total no. of crediting years</b>	7 years		
<b>Annual average over the crediting period</b>	<b>0 MWh</b>	<b>109,500 MWh</b>	<b>109,500 MWh</b>

### **SDG 8: Decent Work and Economic Growth**

The project leads to employment opportunities which would not have been possible in the baseline scenario. The project intends to provide employment to at least 10 people/year. PP also intends to provide at least 01 training per year as confirmed during interviews with PP representatives during remote validation audit. Expected O & M cost per year is 5 million.

### **4. FINAL PROJECT DESIGN CERTIFICATION STATEMENT**

Applus+ Certification has performed the validation of “Wind Power Project in Madhya Pradesh by OBWPPL”. The validation was performed on the basis of Gold Standard GS4GG guidelines 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 fulfillment of stated criteria. In our opinion, the project meets all relevant Gold Standard requirements for the Gold Standard and all relevant host country criteria. The project will hence be recommended by Applus+ Certification for design certification renewal with the Gold Standard Registry.

By displacing fossil fuel-based electricity with electricity generated from a renewable source, the project results in reductions of CO<sub>2</sub> 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 101,944 tCO<sub>2</sub>e per year.


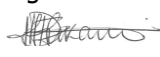

The validation has been performed following the requirements of the Gold Standard GS4GG guidelines, UNFCCC methodology, tools and guidelines and on the basis of the contractual agreement.

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 SDG 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 validation.

**Date:** 24/07/2023  
**Lead Auditor:** Mr. Deepak Pundlik  
**Tech. Expert:** Mr. Pankaj Kumar  
**Auditor :**  
**Tech. Reviewer:** Mr. David Lubanga  
**Approver** (*Applus+ Certification VVB Technical Manager*)  
Mr. Agustín Calle de Miguel

ASSESSMENT TEAM	
<b>Lead Auditor:</b> Deepak Pundlik	<b>Technical Reviewer:</b> David Lubanga
Signature: 	Signature: 
<b>Approver:</b> Mr. Agustín Calle de Miguel	
Signature: 	

## 5. REFERENCE

Sr. No.	Document/Evidence/Reference/Web link, Version, Date
1	Initial GS4GG PDD, version 01 dated 20/06/2023 Final GS4GG PDD, version 04 dated 21/07/2023 based on which the final opinion is provided.
2	Registered PDD version 05, dated 22/03/2018 (1 <sup>st</sup> crediting period) GS passport version 4.0 Validation report by TUV NORD, version 01 dated 03/04/2018 Monitoring report version 04 dated 14/05/2014 Verification report by Applus+, version 02 dated 27/08/2021
3	Minutes of Meeting for Local Stakeholders' Consultation
4	Emission Reduction Sheet for the project activity Ongoing Financial Need requirement worksheet SDG impact tool worksheet
5	Methodology: ACM0002, Version 21.0
6	CDM Project Standard Version 03 CDM Validation & Verification Standard Version 03
7	GS4GG Validation & Verification Standard Version 01
8	CDM Project Cycle Procedure Version 03
9	Tool to calculate the emission factor for an electricity system, version 7.0
10	Tool for the demonstration and assessment of additionality, version 7.0
11	Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period, version 3.0.1
12	Stakeholders' consultation process in GS-PDD and grievance register at the site
13	Training Records of project staff at site
14	Declaration for non-receiving of ODA for project
15	Universal declaration of Human Rights: <a href="https://docs.google.com/document/d/1Y2xVv8h0UxEyR82mU_AZmxGL0xWTawyN/edit#">https://docs.google.com/document/d/1Y2xVv8h0UxEyR82mU_AZmxGL0xWTawyN/edit#</a>
16	Power Purchase Agreement with Madhya Pradesh Power Management Company Limited dated 10/02/2017
17	Commissioning certificates for Wind turbines
18	Technical specifications of Wind turbines
19	HR policy and HSE policy
20	CEA database version 18.0 - <a href="https://cea.nic.in/cdm-co2-baseline-database/?lang=en">https://cea.nic.in/cdm-co2-baseline-database/?lang=en</a>
21	Ministry of power, government of India - <a href="https://powermin.gov.in/en/content/power-sector-glance-all-india">https://powermin.gov.in/en/content/power-sector-glance-all-india</a>
22	Energy meter calibration certificates
23	Operation and maintenance agreement
24	Geo tagged photographs of wind turbines
25	Single line diagram

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

Type:	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	01
Raised by:	Validation team	Ref. to checklist tables:	3.9
Description of the audit finding		Date:	11/07/2023
To confirm project description and implementation, following documents to be submitted:			
<ol style="list-style-type: none"> <li>1. Grievance register</li> <li>2. Meter calibration certificates</li> </ol>			
Project Participant's response		Date:	12/07/2023
In support of project description and implementation, following documents has been submitted.			
Documentation provided as evidence by Project Participant			
<ol style="list-style-type: none"> <li>1. Grievance register</li> <li>2. Meter calibration certificate</li> </ol>			
Auditor's assessment comment		Date:	13/07/2023
<p>PP has submitted grievance register which was checked to confirm that no complaints were received and same was confirmed during remote interviews with the local stakeholders.</p> <p>PP has submitted meter calibration certificates which confirm that the energy meters are calibrated as on today.</p> <p>CL is closed.</p>			

Type:	<input type="checkbox"/> CAR <input checked="" type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	02
Raised by:	Validation team	Ref. to checklist in above tables:	3.9
Description of the audit finding		Date:	11/07/2023
<ol style="list-style-type: none"> <li>1. In section A.1 of the submitted PDD, under social well-being, PP mentions "<i>Power generated from this project activity can be used for small scale industries in the region, thus would generate employment opportunities. Environmental well-being.</i>" PP to clarify is the project activity planning for 3<sup>rd</sup> party sale, and if not then specify rationale behind this assumption.</li> <li>2. In the table of Section A.1.1 of the PDD, PP mentions "The project activity is not registered with any other voluntary or compliance schemes". However, in section A.1 of the PDD, PP referred that project is CDM registered project. Clarification is required.</li> <li>3. In section A.3 of the PDD, PP mentioned PLF is 25%. PP to provide actual PLF achieved in the 1<sup>st</sup> crediting period for more clarity. Clarification is sought.</li> <li>4. In the earlier monitoring reports, for SDG 8, PP has considered cost spent on O&amp;M. However, in the submitted PDD, cost spent on O&amp;M is not considered for SDG 8. Clarification is sought.</li> </ol>			
Project Participant's response		Date:	12/07/2023

Type:	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL/CR	<input type="checkbox"/> FAR	Number:	02
Raised by:	Validation team			Ref. to checklist in above tables:	3.9
<p>1. The statement is removed from section A.1 of the revised PDD as same is not applicable. It is also evident from PPA that no third-party sale involved in the project activity.</p> <p>2. The project activity is not registered in CDM but it was earlier registered in Gold standard and now transitioned to GS4GG and same is mentioned in section A.1 of the RCP PDD.</p> <p>3. The actual PLF achieved in the 1<sup>st</sup> crediting period is coming to be 25% and the same has been incorporated in the PDD as well as ER sheet.</p> <p>4. The O&amp;M cost spent has been added in the PDD and it has been revised as per previous monitoring reports is claiming for cost spent on O&amp;M is considered under SDG 8.</p>					
Documentation provided as evidence by Project Participant					
1. ER sheet					
Auditor's assessment comment				Date:	13/07/2023
<p>1. As confirmed based on project description, submitted power purchase agreement and joint meter readings/invoices, VVB has confirmed that the current project sells the generated electricity to the grid. PP has revised section 1.1 in the submitted PDD version 02 which is checked and confirmed. Hence this part of CL is closed.</p> <p>2. PP has revised section A.1 of revised PDD version 2 to remove reference to CDM remigration. VVB also checked CDM database to confirm that this project is not registered with CDM. Hence this part of CL is closed.</p> <p>3. PP response is unclear. Section A.3 still mentions "The plant load factor assessed by third party for WTGs at project site is 25%.". PP has provided an excel work with the actual generation data to confirm the PLF achieved till date from date of commissioning however the calculation for total no. of days is incorrect. Hence this part of CL is open.</p> <p>4. PP response is unclear. Table 1 of revised PDD v. 2 mentions "income generation" and the registered PDD and subsequent MR mention "cost spent on O &amp; M". Hence this part of CL is open.</p>					
CL is open.					
Project Participant's response				Date:	13/07/2023
<p>3. The total number of days has been corrected in the ER sheet for the calculation of actual PLF and the same has been updated in the revised PDD.</p> <p>4. It has been updated.</p>					
Documentation provided as evidence by Project Participant					
ER sheet					
Auditor's assessment comment				Date:	17/07/2023
<p>3. The submitted ER sheet was checked and it was confirmed that the total no. of days are now corrected. The average PLD achieved till date is 25.36% which is 1.40% higher than the estimated PLF at the time of GS project registration. With this actual PLF, the project is still additional. Hence this part of CL is closed.</p> <p>4. PP has revised table in revised PDD v. 03 which is checked and found that appropriate correction is made. Hence this part of CL is closed.</p>					
CL is closed.					

Type:	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	01
Raised by:	Validation team	Ref. to checklist in above tables:	3.9
Description of the audit finding		Date:	11/07/2023
<ol style="list-style-type: none"> <li>1. PP to provide details of Meter calibration in appendix 01 of the submitted Project design document (PDD). Correction is required.</li> <li>2. PP has used futuristic language throughout the PDD. PP to revise the language as project is already commissioned. Correction is sought.</li> <li>3. In the PDD, PP has used version 1.3 of the GS PDD template which is not the latest. PP to use the latest version of the GS PDD template. Correction is required.</li> <li>4. PP to maintain font and font size consistency throughout the PDD as per the instructions of the template. Corrective action required.</li> <li>5. In section A.1 of the submitted PDD, PP to provide projects details as per the requirements of the template. Correction is required.</li> <li>6. PP has mentioned the Estimated Sustainable Development Contributions in the submitted PDD. However, PP to mention the same in the submitted ER sheet also. Correction is sought.</li> <li>7. PP has mentioned "nearest regional grid" in some sections of the GS PDD. PP to revise the sentence as per present Indian electricity grid scenario. Correction is required.</li> <li>8. Section A.1.2 of the submitted PDD, PP mentions this is CDM registered project. However, PP has not provided the weblink for the respective project. Correction is sought.</li> <li>9. In section A.4 of the submitted PDD, PP to justify the scale referring to the applied Activity Requirements of GS4GG. Correction is sought.</li> <li>10. In Section B.1 of the GS PDD, PP to add "Confirmation that the latest version of the methodology and applicable tools was applied at time of first submission of the Project to Gold Standard". Correction is sought.</li> <li>11. The last paragraph of Section B.5 is not clear. PP to revise the respective paragraph for better clarity. Correction is required.</li> <li>12. In Section B.5.2 of the PDD, PP to demonstrate that with the actual PLF the project still requires carbon revenue. Correction is sought.</li> <li>13. In section B.6 of the submitted PDD, PP has provided the information regarding Leakage emission which is not in line with the applied methodology. Correction is required.</li> <li>14. In B.7.3 of the submitted PDD, PP has mentioned, electricity is sold to 'DISCOM'. However, PP to specify the DISCOM. Correction is sought.</li> <li>15. In section C.1 of the PDD as per GS4GG principal PP to justify if the project is regular or retroactive and ensure KPI table matches. Correction is sought.</li> </ol>			
Project Participant's response		Date:	12/07/2023

Type:	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	01
Raised by:	Validation team	Ref. to checklist in above tables:	3.9
<ol style="list-style-type: none"> <li>1. In PDD template there is Safeguarding Principles Assessment in appendix 1 therefore the calibration details have been incorporated in the appendix 5 of the submitted PDD.</li> <li>2. The language throughout the PDD has been revised.</li> <li>3. The latest GS PDD template 1.5 has been used and revised.</li> <li>4. The font and font size consistency has been maintained throughout the PDD.</li> <li>5. Section A.1 of the submitted PDD has been updated as per the requirements of template guidelines.</li> <li>6. The estimated Sustainable Development Contributions has been incorporated in the ER sheet as well.</li> <li>7. The regional grid name that is MPPMCL has been revised throughout the PDD.</li> <li>8. The project activity is not CDM registered and was earlier registered in Gold Standard only and now transition has been done from gold standard to GS4GG.</li> <li>9. In section A.4 of the submitted PDD, the scale of the project has been updated.</li> <li>10. In section B.1 of the GS PDD, latest version of the methodology and applicable tools has been used and the weblinks are attached for the same in the footnote.</li> <li>11. Section B.5 last paragraph has been reframed in the submitted GS PDD.</li> <li>12. The actual PLF is also 25% which is almost similar to the PLF provided by the third party and the project additionality already established with third party PLF i.e. 25%. Hence, with the actual PLF the project still requires carbon revenue.</li> <li>13. In section B.6 of the submitted PDD, the information regarding Leakage emission has been made in line with the applied methodology.</li> <li>14. The name of the DISCOM has been added in section B.7.3 of the PD.</li> <li>15. As per the registered PDD the SFR date is 24/01/2016 and the start date of the project is 05/05/2016. Hence, as per activity rules and requirements of GS it is a retroactive project and the same has been updated in the revised PDD.</li> </ol>			
Documentation provided as evidence by Project Participant			
<ol style="list-style-type: none"> <li>1. Calibration certificate</li> <li>2. ER sheet</li> <li>3. Commissioning certificate</li> </ol>			
Auditor's assessment comment		Date:	13/07/2023

Type:	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	01
Raised by:	Validation team	Ref. to checklist in above tables:	3.9
<ol style="list-style-type: none"> <li>1. PP has revised PDD v. 2 to include meter calibration details in the appendix. PP shall submit the supporting evidences to confirm the same. Moreover, as per monitoring report version 03 dated 19/10/2021, the energy meter were calibrated on 11/10/2029 and certificate was valid till 10/10/2024. PP shall explain the reason behind re-calibration conducted on 04/02/2021. Hence this part of CAR is open.</li> <li>2. Revised PDD v. 2 was checked and it was confirmed that PP has now made use of correct information as the project is already commissioned. Hence this part of CAR is closed.</li> <li>3. It is noted that PP has revised the template version 1.3 to include details in line with template version 1.5. This is not in line with the GS guidelines. PP shall use the latest template version and submit the GS PDD. Hence this part of CAR is open.</li> <li>4. Revised PDD v. 2 was checked and it was confirmed that PP has now made the concerned changes. Hence this part of CAR is closed.</li> <li>5. Revised PDD v.2 was checked to confirm that section A.1 is revised to include project boundary and other details as required. Hence this part of CAR is closed.</li> <li>6. The revised ER sheet was checked to confirm the SDG indicators and supporting values are now mentioned. Hence this part of CAR is closed.</li> <li>7. PP response is unclear. As per the latest guidelines from the local statutory body from India, there are no regional grids in India. Moreover, M/s. Madhya Pradesh Power Management Company Limited (MPPMCL) is not a grid. Hence this part of CAR is open.</li> <li>8. PP has revised PDD version 2 to remove reference to CDM remigration. VVB also checked CDM database to confirm that this project is not registered with CDM. Hence this part of CAR is closed.</li> <li>9. PP response is unclear. PP to justify the scale referring to the <b>applied Activity Requirements of GS4GG</b>. Hence this part of CAR is open.</li> <li>10. PP response is unclear. In Section B.1 of the GS PDD, PP to add "Confirmation that the latest version of the methodology and applicable tools was applied at time of first submission of the Project to Gold Standard" which is requirement of the template guideline. Hence this part of CAR is open.</li> <li>11. Section B.5 of revised PDD v. 2 was checked and found okay. Hence this part of CAR is closed.</li> <li>12. PP response is unclear. In Section B.5.2 of the PDD, PP to <b>demonstrate</b> that with the actual PLF the project still requires carbon revenue. Hence this part of CAR is open.</li> <li>13. Section B.6 of revised PDD v. 2 was checked and found corrected. Hence this part of CAR is closed.</li> <li>14. PP has revised section B.7.3 to provide correct information regarding power purchase agreement which is checked and confirmed. Hence this part of CAR is closed.</li> <li>15. As per GS4GG Principle 4, Justify if the project is regular, or retroactive and ensure in section C.1. This part of CAR is closed.</li> </ol> <p>CAR is open.</p>			
Project Participant's response		Date:	14/07/2023

Type:	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	01
Raised by:	Validation team	Ref. to checklist in above tables:	3.9
<p>1. The details added in appendix is typo error &amp; same has been corrected in revised PDD. As per registered PDD &amp; MR version 03, calibration frequency is once in 5 year hence last calibration done on 11/10/2019 and due date for next calibration is 10/10/2024. It is also confirmed by PP that calibration is carried out by EB hence it is not in control of PP.</p> <p>3. The latest template version has been used as per GS guidelines and the same has been submitted.</p> <p>7. As per the latest guidelines from the local statutory body from India, there are no regional grids in India and the same has been updated throughout the PDD.</p> <p>9. In section A.4 of the submitted PDD, PP has justified the scale referring to GHG EMISSIONS REDUCTION &amp; SEQUESTRATION PRODUCT REQUIREMENTS version 2.1 referring section 9.1.1 and Renewable Energy Activity Requirements version 1.4 of GS4GG the project is large scale and the same has been updated in the PDD.</p> <p>10. In section B.1 of the GS PDD, latest version of the methodology and applicable tools has been used and the weblinks are attached for the same in the footnote.</p> <p>12. The ongoing financial need in section B.5.2 of the PDD has been updated and its clearly mentioned that with the actual PLF also the project requires carbon revenue.</p>			
Documentation provided as evidence by Project Participant			
Calibration Certificate			
Auditor's assessment comment		Date:	17/07/2023
<p>1. PP has submitted the calibration certificate dated 07/11/2029 by Madhya Pradesh Power Transmission Company Limited, testing division for both the energy meters which confirms calibration was conducted on 11/10/2019. As per registered PDD, this calibration is valid till 10/10/2024. This is checked and confirmed. PP has revised PDD to maintain correct dates and hence this part of CAR is closed.</p> <p>3. PP has now used the correct template i. .e version 1.5 which is checked and confirmed. Hence this part of CAR is closed.</p> <p>7. PP has revised PDD v. 03 to mention Indian grid instead of regional grid which is checked and confirmed. Hence this part of CAR is closed.</p> <p>9. Section A.4 is now revised in the submitted PDD v. 03 and scale justification in line with the applied activity requirements is presented which is checked and confirmed. Hence this part of CAR is closed.</p> <p>10. PP response is unclear. In Section B.1 of the GS PDD, PP to add "Confirmation that the latest version of the methodology and applicable tools was applied at time of first submission of the Project to Gold Standard" which is requirement of the template guideline. Hence this part of CAR is open.</p> <p>12. PP has revised section B.5.2 of PDD v. 03 to include impact on actual PLD on the project's additionality which is appropriate. Hence this part of CAR is closed.</p> <p>CAR is open.</p>			
Project Participant's response		Date:	18/07/2023
<p>10. PP confirms that the latest version of the methodology and applicable tools was applied at time of first submission of the Project to Gold Standard and the same is updated in section B.1 of revised PDD.</p>			
Documentation provided as evidence by Project Participant			
Revised PDD			
Auditor's assessment comment		Date:	19/07/2023
PP has revised section B.1 of PDD version 04 which is checked and confirmed. CAR is closed.			

Type:	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	02
Raised by:	Validation team	Ref. to checklist in above tables:	3.9
Description of the audit finding		Date:	13/07/2023
As per latest guidelines issued by GS4GG, for ongoing financial need PP shall			
<ul style="list-style-type: none"> <li>a. Demonstrate how finance derived from GS certification is material to ongoing sustainability.</li> <li>b. Provide a qualitative narrative supported by project finance</li> <li>c. Provide an information highlighting the key categories and amounts or relative proportions (%) of project income and outgoings, and certification related cost and revenue</li> <li>d. Demonstrate resources required to continue advancing towards the desired outcomes, sustainability progress and adding new challenges</li> </ul>			
Project Participant's response		Date:	14/07/2023
As per latest guidelines issued by GS4GG, for ongoing financial need all the mentioned points have been covered in section B.5.2 of the revised RCP PDD and supporting excel has been provided for the same.			
Documentation provided as evidence by Project Participant			
Ongoing financial need excel			
Auditor's assessment comment		Date:	17/07/2023
PP response is accepted. PP has revised GS PDD v. 03 section B.5.2 to mention the concerned details which were checked and confirmed.			
CAR is closed.			

Type:	<input checked="" type="checkbox"/> CAR <input type="checkbox"/> CL/CR <input type="checkbox"/> FAR	Number:	03
Raised by:	Validation team	Ref. to checklist in above tables:	3.9
Description of the audit finding		Date:	13/07/2023
PP to check and correct information presented in section D and appendix 1 of submitted GS PDD v.03. VVB observed few discrepancies in the information presented. E. g. Safeguarding principle 2 is part of section D however not considered in appendix 1. Safeguarding principle 3 is part of appendix 1 but is not considered in section D. Correction is sought.			
Project Participant's response		Date:	18/07/2023
Section D and appendix 1 are now inline throughout the GSRCP PDD version 4. The safeguarding principle is also updated as per section D and monitoring parameter B.7.1.			
Documentation provided as evidence by Project Participant			
SDG impact tool , GS PDD version 4			
Auditor's assessment comment		Date:	19/07/2023
Revised PDD version 04 was checked to confirm that PP has now corrected in the information and section D and appendix 1 mention the same principles.			
CAR is closed.			

## **Appendix 2: Audit Team CVs**

<b>Name</b>	<b>SHORT CV. BACKGROUND INFORMATION</b>
Deepak Pundlik	<p><b>Mr. Deepak Pundlik</b> has experience in climate change, waste management and environmental management. After completing Masters in Environment Sciences from Pune university, He has worked in waste management field. As a GHG consultant, He handled projects under renewable energy, waste management sectors during his stint with companies - MITCON and Thermax. Post Thermax, Deepak was involved in organic farming research project with Tata Institute of Social Sciences. As a GHG auditor, He has validated/verified projects under CDM/VCS/GS and GCC mechanisms from renewable energy, energy demand, waste management sectors.</p>
Pankaj Kumar	<p><b>Mr. Pankaj Kumar</b> has done M. Sc in Environment Management from Forest Research Institute, Dehradun and B. Sc. (Hons.) in Environment &amp; Water Management from Magadh University, Bihar, India. He has also done Post Graduate Diploma in Environmental Law from NLSIU, Bangalore. He has more than 12 years of working experience in GHG Assessments and has participated during his career in Agencies and DOEs like MITCON, Agrinergy, Carbon Check and is empanelled with Applus+ Certification since 2015 for the performance of CDM/VCS/GS project assessments.</p> <p>He has extensive experience in the Renewable, Waste Management and Energy Demand Scopes of UNFCCC CDM and has done more than 100 Validations and Verifications of PAs and PoAs as Lead Auditor, Technical Expert and Technical Reviewer, mainly in Asia, Africa, USA, Asia Pacific and Americas under CDM, Verified Carbon Standard, Gold Standard &amp; Social Carbon Standard, Brazil.</p> <p>He is an experienced, qualified and result oriented Environment and climate change professional having 16 yrs. of relevant experience in Climate Change (Mitigation &amp; Adaptation), Environmental Due Diligence, Disaster Risk Reduction, Climate finance, adaptation planning, capacity building, validation and verification of GHG project. He can also provide technical support for environmental investigative, remedial projects involving air, water and soil, Waste management, EIA, Environmental Compliance, ISO 14001, OHSAS 18001, GHG accounting (ISO 14064) and Carbon foot printing.</p>
David Lubanga	<p><b>Mr. David Lubanga</b> is a trained engineer with over 10 years of experience as a GHG auditor. His experience in the field includes assessment of renewable energy projects, energy efficiency, energy audits and waste management and waste to energy. He is a certified auditor for ISO 50001 and 14064-2. He has successfully audited more than 300 GHG (CDM/VCS/GS) projects in different countries around the world.</p>



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David holds a BSc. in Biochemical Engineering from Jacobs University Bremen (Germany), and a MSc in Environmental Resource Management from Brandenburg Technical University Cottbus (Germany), and Sheffield Hallam University (England).

He has undergone additional professional training in Renewable energies, Renewable Energy and Finance, Energy Efficiency and waste management in Scotland, Germany and Austria.

**Appendix 3: GS4GG audit technique**

AUDITING TECHNIQUES REPORT

**For Design Certification and Design Certification Renewal**

Scope of assessment	Auditing technique(s) used <sup>[1]</sup>	Has the audit technique(s) been sufficient to validate the aspect? <sup>[2]</sup>	Risk(s) identified <sup>[3]</sup>	Auditing tools used as a part of mitigation of identified risks <sup>[4]</sup>	Findings raised <sup>[5]</sup> (if applicable)	Conclusion	Reference to the key evidence supporting the Conclusion
Purpose and general description of project	Document review, stakeholder interviews	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review, Video call (skype/MS team). Satellite imaging		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template.
Eligibility of the project under Gold Standard	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review	CL 02, CAR 02	Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, GS4GG eligibility criteria
Legal ownership of products generated by the project and legal rights to alter use of resources required to service the project	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, commissioning certificate.
Location of project	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review, Satellite imaging		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template., commissioning certificate, power purchase

			scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).				agreement, geo-tagged photographs of Wind Turbines
Technologies and/or measures	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, technical specifications of wind turbines
Scale of the project	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, commissioning certificate.
Funding sources of project	Document review, stakeholder interviews	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template
<b>APPLICATION OF APPROVED GOLD STANDARD METHODOLOGY (IES) AND/OR DEMONSTRATION OF SDG CONTRIBUTIONS</b>							
Applicability of methodology (ies)	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, CDM approved methodology - ACM0002 version 21.0

			reductions, monitoring methodology).				
ACM0002						Positive	
<p>This methodology is applicable to grid-connected renewable power generation project activities that:</p> <p>a. install a Greenfield power plant;</p> <p>b. involve a capacity addition to (an) existing plant(s);</p> <p>c. involve a retrofit of (an) existing operating plants/units;</p> <p>d. involve a rehabilitation of (an) existing plant(s)/unit(s) or</p> <p>e. involve a replacement of (an) existing plant(s)/unit(s).</p>	Document review	Yes	<p>Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).</p>	Remote document and data review		Positive	<p>Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, CDM approved methodology - ACM0002 version 21.0</p>
<p>The project activity may include renewable energy power plant/unit of one of the following types: hydro power plant/unit with or without reservoir, Wind power plant/unit, geothermal power plant/unit, Wind power plant/unit, wave power plant/unit or tidal power plant/unit;</p>	Document review	Yes	<p>Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).</p>	Remote document and data review		Positive	<p>Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, CDM approved methodology - ACM0002 version 21.0</p>

<p>In the case of capacity additions, retrofits, rehabilitations or replacements (except for Wind, Wind, wave or tidal power capacity addition projects the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity;</p>	<p>Document review</p>	<p>Yes</p>	<p>Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).</p>	<p>Remote document and data review</p>	<p>Positive</p>	<p>Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, CDM approved methodology - ACM0002 version 21.0</p>
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<p>In case of hydro power plants, one of the following conditions shall apply:</p> <p>a. The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or</p> <p>b. The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density calculated using equation (3), is greater than 4 W/m<sup>2</sup>; or</p> <p>c. The project activity results in new single or multiple reservoirs and the power density, calculated using equation (3), is greater than 4 W/m<sup>2</sup>.</p> <p>d. The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs, calculated using equation (3), is lower than or equal to 4 W/m<sup>2</sup>, all of the following conditions shall apply:</p> <p>i) The power density calculated using the total installed capacity of the integrated project, as per equation (4), is greater than 4 W/m<sup>2</sup></p> <p>ii) Water flow between reservoirs is not used by any other hydropower</p>			Positive	<p>Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, CDM approved methodology - ACM0002 version 21.0</p>
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<p>unit which is not a part of the project activity;</p> <p>iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m<sup>2</sup> shall be;</p> <p>a. Lower than or equal to 15 MW; and</p> <p>b. Less than 10 per cent of the total installed capacity of integrated hydro power project</p>							
<p>In the case of integrated hydro power projects, project participant shall:</p> <p>i) Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or</p> <p>ii) Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The</p>	<p>Document review</p>	<p>Yes</p>	<p>Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).</p>	<p>Remote document and data review</p>		<p>Positive</p>	<p>Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, CDM approved methodology - ACM0002 version 21.0</p>

<p>purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum five years prior to implementation of CDM project activity.</p>							
<p>Methodology is not applicable to the following:  a. Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site;  b. Biomass fired power plants/units</p>	<p>Document review</p>	<p>Yes</p>	<p>Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).</p>	<p>Remote document and data review</p>		<p>Positive</p>	<p>Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, CDM approved methodology - ACM0002 version 21.0</p>
<p>In the case of retrofits, rehabilitations, replacements, or capacity additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is "the continuation of the current</p>	<p>Document review</p>	<p>Yes</p>	<p>Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).</p>	<p>Remote document and data review</p>		<p>Positive</p>	<p>Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, CDM approved methodology - ACM0002 version 21.0</p>

situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance”.						
Project boundary	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, CDM approved methodology - ACM0002 version 21.0
Establishment and description of baseline scenario	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, CDM approved methodology - ACM0002 version 21.0, tool for assessment of baseline at the renewal of crediting period
Demonstration of additionality	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template
Prior Consideration	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms	Remote document and data review		Positive  Not applicable

			and/or formulae used to determine emission reductions, monitoring methodology).			
Ongoing Financial Need	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport, ongoing financial excel sheet, submitted PLF data
Explanation of methodological choices/approaches for estimating the SDG Impact	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template.
Data and parameters fixed ex ante	Document review	No	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport
Parameter 1 - W <sub>OM</sub>	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport, CEA database, CDM tool - 07

			reductions, monitoring methodology).			
<i>Parameter 2 - <math>W_{BM}</math></i>	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport, CEA database, CDM tool - 07
<i>Parameter 3 - <math>EF_{grid,OM,y}</math></i>	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport, CEA database, CDM tool - 07
<i>Parameter 4 - <math>EF_{grid,BM,y}</math></i>	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport, CEA database, CDM tool - 07
<i>Parameter 5 - <math>EF_{grid,CM,y}</math></i>	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS passport, CEA database, CDM tool - 07

			reductions, monitoring methodology).			
Ex ante estimation of SDG Impact	Document review, stakeholder interviews	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport
Summary of ex ante estimates of each SDG Impact	Document review, stakeholder interviews	No	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport
<i>SDG impact 7</i>	Document review, stakeholder interviews	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport
<i>SDG impact 8</i>	Document review, stakeholder interviews	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission	Remote document and data review		Positive  Latest GS PDD for renewal of design certification, registered PDD and GS Passport

			reductions, monitoring methodology).				
<i>SDG impact 13</i>	Document review, stakeholder interviews	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport
<b>MONITORING PLAN</b>							
Data and parameters to be monitored	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive	
<i>Parameter 1 - EGP, Grd, y</i>	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review	CL 01	Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, ER sheet
Parameter 2 - ER <sub>y</sub>	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, ER sheet

			and/or formulae used to determine emission reductions, monitoring methodology).				
Parameter 3 - Number of employment generation	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, ER sheet
Parameter 4 - Quality Employment	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, ER sheet
Parameter 5 - O & M cost	Document review	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, ER sheet
Sampling plan	Document review, stakeholder interviews	Yes	N/a	N/a		Positive	N/a
Other elements of monitoring plan	Document review, stakeholder interviews	Yes	Risk of non-conformity with key methodological requirements (applicability conditions, project boundary, identification of baseline scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template.

			scenario, algorithms and/or formulae used to determine emission reductions, monitoring methodology).			
<b>DURATION AND CREDITING PERIOD</b>						
Start date of project	Document review	Yes	Risk of non-conformity with core GS4GG principles including but not limited to safeguarding principles, stakeholder inclusivity, SDG Impacts.	Remote document and data review		Positive Latest GS PDD for renewal of design certification, registered PDD and GS Passport, commiosioning certificate
Expected operational lifetime of project	Document review	Yes	Risk of non-conformity with core GS4GG principles including but not limited to safeguarding principles, stakeholder inclusivity, SDG Impacts.	Remote document and data review		Positive Latest GS PDD for renewal of design certification, registered PDD and GS Passport, technical specifications of wind turbines
Start date of crediting period	Document review	Yes	Risk of non-conformity with core GS4GG principles including but not limited to safeguarding principles, stakeholder inclusivity, SDG Impacts.	Remote document and data review		Positive Latest GS PDD for renewal of design certification, registered PDD and GS Passport
Total length of crediting period	Document review	Yes	Risk of non-conformity with core GS4GG principles including but not limited to safeguarding principles, stakeholder inclusivity, SDG Impacts.	Remote document and data review		Positive Latest GS PDD for renewal of design certification, registered PDD and GS Passport
<b>SUMMARY OF SAFEGUARDING PRINCIPLES AND GENDER SENSITIVE ASSESSMENT</b>						
Safeguarding Principles that will be monitored	Document review	Yes	Risk of non-conformity with core GS4GG principles including but not limited to safeguarding principles, stakeholder inclusivity, SDG Impacts.	Remote document and data review		Positive Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, safeguarding principles and requirements
Assessment that project complies with GS4GG Gender Sensitive requirements	Document review	Yes	Risk of non-conformity with core GS4GG principles including but not limited to safeguarding principles, stakeholder	Remote document and data review		Positive Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, safeguarding

			inclusivity, Impacts.	SDG			principles and requirements
<b>SUMMARY OF LOCAL STAKEHOLDER CONSULTATION</b>							
Summary stakeholder mitigation measures	Document review, stakeholder interviews	Yes	Risk of any negative feedback/observations received from GS stakeholders, e.g., TAC, end-users, NGO supporters etc, not being addressed sufficiently by the project.	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, ongoing stakeholder consultation
Final continuous input / grievance mechanism	Document review, stakeholder interviews	Yes	Risk of any negative feedback/observations received from GS stakeholders, e.g., TAC, end-users, NGO supporters etc, not being addressed sufficiently by the project.	Remote document and data review	CL 01	Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, ongoing stakeholder consultation
Safeguarding Principles Assessment	Document review, stakeholder interviews	Yes	Risk of any negative feedback/observations received from GS stakeholders, e.g., TAC, end-users, NGO supporters etc, not being addressed sufficiently by the project.	Remote document and data review		Positive	Latest GS PDD for renewal of design certification, registered PDD and GS Passport, GS4GG PDD template, safeguarding principles and requirements

## Appendix 4: Safeguarding principle assessment

SOCIAL SAFEGUARDING PRINCIPLES			
Reference requirement	Question	PD Response	VVB assessment
<b>P.1   Human Rights</b>			
P.1.1.1	Does the project developer, its representatives and the Project disrespect internationally proclaimed human rights?	<input type="checkbox"/> 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 validation team confirms that Project activity fulfils the GS certification requirement outlined in the P.1 of the GS4GG safeguarding principles requirements versio 2.1
-		<input checked="" type="checkbox"/> NO	
P.1.1.1	Is the project involved or complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
P.1.1.2	Have local communities or individuals raised human rights concerns regarding the project (e.g., during the stakeholder engagement process, grievance processes, public statements)?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
P.1.1.3	Is there a risk that rights-holders (e.g., Project-affected stakeholders) do not have the capacity to claim their rights?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
P.1.1.3	Does this project undermine national or regional measures for the realisation of the right to development?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
P.1.1.1	adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalised groups?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
P.1.1.2	inequitable or discriminatory impacts on affected populations, particularly people living in poverty or marginalised or excluded individuals or groups, including persons with disabilities?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
P.1.1.3	restrictions in availability, quality of and/or access to resources or basic services, in particular to marginalised individuals or groups, including persons with disabilities?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
P.1.1.3	exacerbation of conflicts among and/or the risk of violence to project-affected communities and individuals?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<b>P.2   Gender Equality and Women's Empowerment</b>			
P.2.1.1	Have women's groups/leaders raised gender equality concerns regarding the project, (e.g., during the stakeholder engagement process, grievance processes, public statements)?	<input type="checkbox"/> YES	The PD does not identify any risk against the defined principle. The justification provided by the PP was
-		<input checked="" type="checkbox"/> NO	
-			

P.2.1.2	Does the project undermine the principles of non-discrimination, equal treatment, and equal pay for equal work?	<input checked="" type="checkbox"/> YES	found acceptable and was confirmed by the validation team during the remote audit and interviews.
-		<input type="checkbox"/> NO	
P.2.1.2	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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
P.2.1.2	Does the project limit the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
P.2.1.3	Has the project assessed gender risks without referencing the country's gender strategy or equivalent national commitment?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> 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 validation team during the remote audit and interviews.
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
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.	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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**

P.3.1.1	Does the project involve potential risks to the health and safety of affected communities during its life cycle?	<input type="checkbox"/> YES	PP confirmed that all the employees will be trained about health and safety issues during operation phase of the project. quirement outlined in the GS4GG safeguarding principles requirements version 2.1
-		<input checked="" type="checkbox"/> NO	
P.3.1.2	Does the project involve any potential risks to the workers' safety and health?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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:			
P.3.1.1	construction and/or infrastructure development (e.g., roads, buildings, dams)?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
P.3.1.2	air pollution, noise, vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, sanitation?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
P.3.1.2	harm or losses due to failure of structural elements of the project (e.g., collapse of buildings or infrastructure)?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
P.3.1.2	risks of water-borne or other vector-borne diseases (e.g., temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
P.3.1.2	transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g., explosives, fuel and other chemicals during construction and operation)?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
P.3.1.2	adverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g., food, surface water purification, natural buffers from flooding)?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
Briefly describe below how the project is addressing any			

identified risk related to community health and safety.			
NA			
<b><u>P.4   Cultural Heritage, Indigenous People, Displacement and Resettlement</u></b>	-	-	
<b><u>P.4.1   Sites of Cultural and Historical Heritage</u></b>	-	-	
<b><u>P.4.1.1  </u></b>	Does the project involve altering, damaging, or removing sites, objects, or structures of significant cultural heritage?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> 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 validation team during the remote audit and interview.
-			
If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.			
NA			
Would the project potentially involve or lead to:			
<b><u>P.4.1.1.1  </u></b>	activities adjacent to or within a cultural heritage site?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<b><u>P.4.1.1.1  </u></b>	significant excavations, demolitions, movement of earth, flooding or other environmental changes?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<b><u>P.4.1.1.1  </u></b>	alterations to landscapes and natural features with cultural significance?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<b><u>P.4.1.1.1  </u></b>	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)	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<b><u>P.4.1.2  </u></b>	utilisation of tangible and/or intangible forms (e.g., practices, traditional knowledge) of	<input type="checkbox"/> YES	

-	Cultural Heritage for commercial or other purposes?	<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<u>P.4.1.2  </u>	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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> NA	
<u>P.4.1.3  </u>	If answer to question above is "YES" - does the project provide equitable sharing of benefits from commercialisation of such knowledge, innovation, or practice, consistent with their customs and traditions?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> NA	
<u>P.4.1.4  </u>	If answer to question above is "YES" - are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> NA	
<u>P.4.1.4  </u>	If answer to question above is "YES", has project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.4.2   Forced Eviction and Displacement</u>			
-	-	-	
<u>P.4.2.1  </u>	Does the project involve any risks related to involuntary relocation of people?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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 validation team during the remote audit and interview.
NA			

Would the project potentially involve or lead to:			
<u>P.4.2.1</u>	risk of forced evictions or involuntary relocation of people?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<u>P.4.2.2</u>	temporary or permanent and full or partial physical displacement (including people without legally recognisable claims to land)?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
<i>NA</i>			
<u>P.4.3</u>   Land tenure and other rights	-	-	
<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?	<input type="checkbox"/> 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 validation team during the remote audit and interview.
-		<input checked="" type="checkbox"/> NO	
If the answer to question above is "yes," please explain the reason and how the project will ensure compliance with applicable requirements.			
<i>NA</i>			

Would the project potentially involve or lead to:			
<u>P.4.3.1</u>	impacts on or changes to land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<u>P.4.3.2</u>	Changes in legal arrangements, if yes, are the changes done in line with relevant laws and regulations?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> NA	
<u>P.4.3.4</u>	If answer to question above is "YES", have project design been changed, modified, updated considering opinions and recommendations of an Expert Stakeholder?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.4.4</u>  Indigenous peoples	-	-	
<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?	<input type="checkbox"/> 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 validation team during the remote audit and interview.

-		<input checked="" type="checkbox"/> 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 potentially involve or lead to:			
<u>P.4.4.1</u>		<input type="checkbox"/> YES	
-	affect areas where indigenous peoples are present (including project area of influence)	<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<u>P.4.4.1</u>		<input type="checkbox"/> YES	
-	affect areas, land and territory claimed by indigenous peoples?	<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<u>P.4.4.1</u>		<input type="checkbox"/> YES	
-	impacts (positive or negative) to the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples?	<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<u>P.4.4.7</u>		<input type="checkbox"/> YES	
-	If answer to above questions is "YES" or "POTENTIALLY", - Is it determined that the proposed project may affect the rights, lands, resources, or territories of indigenous people?	<input checked="" type="checkbox"/> NO	
-	- Has an "Indigenous People Plan" (IPP) or "Indigenous People Plan Framework" been elaborated and included in the project documentation?	<input type="checkbox"/> 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>		<input type="checkbox"/> YES	
-	risk of forcibly removing indigenous people from their lands and territories?	<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<u>P.4.4.4</u>		<input type="checkbox"/> YES	
-	utilisation and/or commercial development of natural resources on lands and territories claimed by indigenous peoples? Consider,	<input type="checkbox"/> POTENTIALLY	

-	and where appropriate ensure, consistency with the answers under Principle 4.1 above	<input checked="" type="checkbox"/> NO	
<u>P.4.4.5  </u>	If answer to question above is "YES" or "POTENTIALLY"	<input type="checkbox"/> YES	
	- Did the project obtain free, prior and informed consent from indigenous people before taking their cultural, intellectual, religious, and/or spiritual property?	<input checked="" type="checkbox"/> NO	
<u>P.4.4.6  </u>		<input type="checkbox"/> NA	
	- Does the project ensure that the indigenous people receive an equitable sharing of benefits resulting from the use of their traditional knowledge and practices? ?		
	- Does the project ensure that the sharing of benefits resulting from the use of indigenous peoples' traditional knowledge and practices is culturally appropriate and inclusive?		
	- Does the project ensure that the provision of equitable sharing of benefits does not impede land rights or equal access to basic services including health services, clean water, energy, education, safe and decent working conditions, and housing?		
<u>P.4.4.8  </u>	Does the project lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> 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			
<b>P.5   Corruption</b>	-	-	
<u>P.5.1.1  </u>	Does the project involve, or is it complicit in, contributing to or reinforcing corruption or corrupt projects?	<input type="checkbox"/> 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 validation team during the remote audit and interview.
-		<input checked="" type="checkbox"/> NO	
<u>P.5.1.1  </u>	Does the project have a risk of encouraging bribery, kickbacks, or other unethical behavior?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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			
<b>ECONOMIC SAFEGUARDING PRINCIPLES</b>			
<b>P.6   Economic Impacts</b>	-	-	
<u>P.6.1   Labour Rights and Working Conditions</u>	-	-	
<u>P.6.1.1  </u>	Does the project involve, facilitate, or condone forced labor, or pose a potential risk of forced labor?	<input type="checkbox"/> YES	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 validation team during the remote audit.
-		<input checked="" type="checkbox"/> NO	
<u>P.6.1.1  </u>	Does the project violate any labor or health and safety laws, international obligations, or ILO conventions?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
<u>P.6.1.2  </u>	Does the project violate the principles of equal opportunity and fair treatment in its employment decisions?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
<u>P.6.1.3  </u>	Does the project violate national laws, if available regarding non-discrimination in employment?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
<u>P.6.1.4  </u>	Does the project allow child labor?	<input type="checkbox"/> YES	
<u>P.6.1.5  </u>		<input checked="" type="checkbox"/> NO	
<u>P.6.1.7  </u>	Does the project have insufficient processes and measures in place to ensure the safety and health of project workers?	<input checked="" type="checkbox"/> YES	
<u>P.6.1.8  </u>		<input type="checkbox"/> NO	
<u>P.6.1.9  </u>	Does the project have insufficient measures to safeguard and support vulnerable project workers, such as women, people with	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	

	disabilities, migrant workers, and young workers, and to prevent any kind of harassment, abuse, bullying, or exploitation, including gender-based violence (GBV)?	
P.6.1.10	Does the project have no grievance mechanism available for workers to voice workplace concerns? Is information about this mechanism not provided to workers at the time of recruitment, or is it not easily accessible?	<input type="checkbox"/> YES
-		<input checked="" type="checkbox"/> NO
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.		
<i>The Project Developer ensures the training of workers, documentation and reporting of accidents and incidents, and emergency preparedness and response measures.</i>		
Would the project potentially involve or lead to:		
(note: applies to both project and contractor workers)		
P.6.1.1	use of forced labour?	<input type="checkbox"/> YES
-		<input type="checkbox"/> POTENTIALLY
-		<input checked="" type="checkbox"/> NO
P.6.1.1	working conditions that do not meet national labour laws and international commitments?	<input type="checkbox"/> YES
-		<input type="checkbox"/> POTENTIALLY
-		<input checked="" type="checkbox"/> NO
P.6.1.1	working conditions that may deny freedom of association and collective bargaining?	<input type="checkbox"/> YES
-		<input type="checkbox"/> POTENTIALLY
-		<input checked="" type="checkbox"/> NO

P.6.1.1	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.	<input type="checkbox"/> YES
-		<input type="checkbox"/> POTENTIALLY
-		<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> YES
-		<input type="checkbox"/> POTENTIALLY
-		<input checked="" type="checkbox"/> 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	<input type="checkbox"/> YES
-		<input type="checkbox"/> POTENTIALLY
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES
-		<input type="checkbox"/> POTENTIALLY
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES
-		<input type="checkbox"/> POTENTIALLY
-		<input checked="" type="checkbox"/> NO
P.6.1.2	harassment, intimidation, and/or exploitation, especially in regard to women?	<input type="checkbox"/> YES
-		<input type="checkbox"/> POTENTIALLY
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES
-		<input type="checkbox"/> POTENTIALLY
-		<input checked="" type="checkbox"/> NO
P.6.1.4	use of child labour? (including third-party engaged workers)	<input type="checkbox"/> YES
-		<input type="checkbox"/> POTENTIALLY
-		<input checked="" type="checkbox"/> NO
P.6.1.4	inadequate and verifiable mechanisms for age verification?	<input type="checkbox"/> YES
-		<input checked="" type="checkbox"/> NO
P.6.1.7	no processes and measures in place for the safety and health of project workers?	<input type="checkbox"/> YES
-		<input checked="" type="checkbox"/> NO
P.6.1.7		<input type="checkbox"/> YES

-	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?	<input checked="" type="checkbox"/> NO	
<u>P.6.1.7</u>	No provision to record and document accidents, diseases, incidents, and any resulting injuries, illnesses, or deaths?	<input checked="" type="checkbox"/> YES	
-		<input type="checkbox"/> NO	
<u>P.6.1.8</u>	occupational health and safety risks due to physical, chemical, biological and psychosocial hazards (including violence and harassment) throughout the project life-cycle?	<input checked="" type="checkbox"/> YES	
-		<input type="checkbox"/> NO	
<u>P.6.1.9</u>	No measures to protect vulnerable project workers from harassment, exploitation, and gender-based violence (GBV)? This includes women, people with disabilities, migrant workers, and young workers.	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
<u>P.6.1.10</u>	No grievance mechanism available for workers to voice workplace concerns.	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
<u>P.6.1.11</u>	No measures for due diligence and the establishment of policies and procedures to manage and monitor the performance of third-party employees in the project?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
P.6.1.8 - The Project Developer ensures the training of workers, documentation and			
reporting of accidents and incidents and emergency preparedness and response measures. All the supporting documents are been provided as follows:			
Training Attendance sheets.			
Employee Records			
Salary slips of the employees			
<u>P.6.2</u>   <u>Negative Economic Consequences</u>	-	-	
<u>P.6.2.1</u>		<input type="checkbox"/> YES	

-	Is there a risk of project failure during implementation or after project certification due to a lack of financial resources?	<input checked="" type="checkbox"/> NO	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 validation team during the remote audit and interview.
P.6.2.2	Does the project have potential negative impacts or pose a risk to the local economy?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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			
<b>Would the project involve or lead to:</b>			
P.6.2.2	economic impacts (negative/detrimental) to the local economy?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
P.6.2.2	negative economic consequences during and after project implementation, e.g., for vulnerable and marginalised social groups in targeted communities?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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			
<b>P.7   Climate and Energy</b>			
<b>P.7.1   GHG Emissions</b>			
P.7.1.1	Does the project have a risk of increasing greenhouse gas emissions over the Baseline Scenario?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the validation team during the remote audit and interview.

NA			
Would the project involve or lead to:			
<u>P.7.1.1</u>	increase greenhouse gas emissions over the Baseline Scenario?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.7.2</u>   Energy supply	-	-	
<u>P.7.2.1</u>	Does the project pose a risk to the availability and reliability of energy supply to other users?	<input type="checkbox"/> 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 validation team during the remote audit and interview.
-		<input checked="" type="checkbox"/> 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.7.2.1</u>	negative impact on the availability and reliability of energy supply to other users?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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			
<b><u>P.8</u></b>   Water	-	-	
<u>P.8.1</u>   Impact on Natural Water Patterns/Flows	-	-	
<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?	<input type="checkbox"/> 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 validation team during
-		<input checked="" type="checkbox"/> NO	
<u>P.8.1.1</u>	Does the project result in the discharge of wastewater that does not meet the required standard for beneficial reuse and could therefore negatively impact the environmental flow?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
<u>P.8.1.1</u>		<input type="checkbox"/> YES	

-	Does the project have the potential risk to exceed the rate of recharge for the groundwater source?	<input checked="" type="checkbox"/> NO	the remote audit and interview.
<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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
<i>NA</i>			
Would the project involve or lead to:			
<u>P.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?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<u>P.8.1.1  </u>	Wastewater discharge of quality that does not meet the required standard for beneficial reuse?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<u>P.8.1.1  </u>	significant extraction, diversion of ground water? For example, construction of dams, reservoirs, river basin developments, groundwater extraction	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> NA	
If the answer is "yes" or "potentially" to any of the above questions, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
<i>NA</i>			
<u>P.8.2  Erosion and/or Water Body Instability</u>	-	-	
<u>P.8.2.1  </u>	Does the project have a risk of negatively impacting the catchment and has it been assessed and addressed?	<input type="checkbox"/> 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 validation team during
-		<input checked="" type="checkbox"/> NO	
If the answer to question above is "yes," please explain project situation and how			

the project will ensure compliance with applicable requirements.			the remote audit and interview.
<i>NA</i>			
Would the project involve or lead to:			
<u>P.8.2.2</u>	negatively impact on the catchment area?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
<u>P.8.2.5</u>	<i>If yes, Erosion prevention measures, including soil and slope protection measures, must be implemented before project commencement. These measures should involve natural terracing, infiltration strips, permanent ground cover, hedge and tree rows, and effective slope length assessment. Regular reassessment of these measures is necessary.</i>	<input checked="" type="checkbox"/> NO	
<u>P.8.2.6</u>	Are opinions and recommendations of an Expert Stakeholder(s) not sought and demonstrated as being included in the project design?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> NO	
-		<input checked="" type="checkbox"/> 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>			
<b><u>P.9</u></b> <b><u>Environment, ecology and land use</u></b>	-	-	
<u>P.9.1</u>  Landscape Modification and Soil	-	-	
<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.	<input type="checkbox"/> 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 validation team during the remote audit and interview.
-		<input checked="" type="checkbox"/> NO	
<u>P.9.1.3</u>			
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with			

applicable requirements.				
<i>NA</i>				
Would the project involve or lead to:				
<u>P.9.1.4</u>	production, harvesting, and/or management of living natural resources by small-scale landholders and/or local communities?	<input type="checkbox"/> 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 validation team during the remote audit and interview.	
-		<input type="checkbox"/> POTENTIALLY		
-		<input checked="" type="checkbox"/> NO		
<u>P.9.1.4</u>	if answer to above question "yes" or "potentially", does project adopt appropriate and culturally sensitive sustainable resource management practices?	<input type="checkbox"/> YES		
-		<input checked="" type="checkbox"/> No		
-		<input type="checkbox"/> 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.9.2</u>   <u>Vulnerability to Natural Disaster</u>	-	-		
<u>P.9.2.1</u>	Does the project have any risks associated with natural or man-made hazards that could result from land use changes due to the project?	<input type="checkbox"/> 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 validation team during the remote audit and interview.
-		<input checked="" type="checkbox"/> 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.9.2.2</u>	any potential risks that require emergency preparedness and response planning?	<input type="checkbox"/> YES		
-		<input type="checkbox"/> POTENTIALLY		
-		<input checked="" type="checkbox"/> NO		
<u>P.9.2.2</u>	if answer to above question "yes" or "potentially", did the project developer disclose appropriate information about emergency preparedness and response to affected communities?	<input type="checkbox"/> YES		
-		<input checked="" type="checkbox"/> No		
-		<input type="checkbox"/> 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.9.3   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?	<input type="checkbox"/> 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 validation team during the remote audit and interview.
-		<input checked="" type="checkbox"/> 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.9.3.1  </u>	the transfer, handling and use of genetically modified organisms/living modified organisms (GMOs/LMOs) that result from modern biotechnology	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> No	
-		<input type="checkbox"/> NA	
<u>P.9.3.2  </u>	If answer to above question is "yes" has any risks identified in the risk assessment?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> No	
-		<input type="checkbox"/> 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.	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> No	
-		<input type="checkbox"/> 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.9.4   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?	<input type="checkbox"/> YES	The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and
-		<input checked="" type="checkbox"/> NO	
If the answer to question above is "yes," please			

explain project situation and how the project will ensure compliance with applicable requirements.			was confirmed by the validation team during the remote audit and interview.
NA			
Would the project involve or lead to:			
<u>P.9.4.1</u>	any potential risk of pollutant release that cannot be avoided?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<u>P.9.4.3</u>	If answer to above question is "Yes" or "potentially", has the project identified all potential pollution sources that may degrade the quality of soil, air, surface, and groundwater in the project area?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> No	
-		<input type="checkbox"/> NA	
<u>P.9.4.2</u>	If answer to above question is "Yes" or "potentially", do the pollution prevention and control technologies and practices applied during the project life cycle align with national regulations or international best practices?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> No	
-		<input type="checkbox"/> NA	
<u>P.9.4.3</u>	If answer to above question is "Yes", is there a monitoring plan to ensure that mitigation measures are implemented, and resources are protected?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> No	
-		<input type="checkbox"/> 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.9.5  Hazardous and Non-hazardous Waste</u>	-	-	
<u>P.9.5.1</u>	Does the project involve the generation of waste materials (both hazardous and non-hazardous)?	<input checked="" type="checkbox"/> 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 validation team during the remote audit and interview.
-		<input type="checkbox"/> NO	
<u>P.9.5.3</u>	Does the project involve risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	<input checked="" type="checkbox"/> YES	
-		<input type="checkbox"/> NO	
<u>P.9.5.5</u>	Does the project involve the use of any chemicals or materials subject to international bans or phase-outs?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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?	<input checked="" type="checkbox"/> YES
-		<input type="checkbox"/> POTENTIALLY
-		<input type="checkbox"/> NO
<u>P.9.5.1</u>	treatment, destruction, or disposal of waste material?	<input checked="" type="checkbox"/> YES
-		<input type="checkbox"/> No
-		<input type="checkbox"/> 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?	<input checked="" type="checkbox"/> YES
-		<input type="checkbox"/> No
-		<input type="checkbox"/> NA
<u>P.9.5.3</u>	risk of release of hazardous materials resulting from their production, transportation, handling, storage, or use?	<input type="checkbox"/> YES
-		<input checked="" type="checkbox"/> No
-		<input type="checkbox"/> NA
<u>P.9.5.3</u>	If answer to above question is "yes", does project has measures in place to address health risks?	<input type="checkbox"/> YES
-		<input type="checkbox"/> No
-		<input checked="" type="checkbox"/> 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	<input type="checkbox"/> YES
-		<input checked="" type="checkbox"/> POTENTIALLY
-		<input type="checkbox"/> 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</i>		

<i>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 &amp; Fertilisers</u>	-	-	
<u>P.9.6.1  </u>	Does the project involve the use of chemical pesticides?	<input type="checkbox"/> 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 validation team during the remote audit and interview.
-		<input checked="" type="checkbox"/> NO	
<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)	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
If the answer to any of the questions above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			
<i>NA</i>			
Would the project involve or lead to:			
<u>P.9.6.1  </u>	chemical pesticides use for pest management?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<u>P.9.6.4  </u>	If answer to question above is "yes" or "potentially", does project has documented Chemical Pesticides Policy in place?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> No	
-		<input checked="" type="checkbox"/> NA	
<u>P.9.6.5  </u>	purchase, store, use, manufacture, or trade in Class II (moderately hazardous) pesticides?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	

-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> No	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> 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 validation team during the remote audit and interview.
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> 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 validation team during the remote audit and interview.
-		<input checked="" type="checkbox"/> NO	
If the answer to the 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.9.8.1</u>	modification of the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
If the answer is "yes" or "potentially" to the above question, please provide a brief description of the project situation below. Also, provide justification and/or evidence as necessary to demonstrate compliance with applicable requirements.			
NA			
<u>P.9.9   Animal Welfare</u>	-	-	
<u>P.9.9.1</u>	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.	<input type="checkbox"/> 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 validation team during the remote audit and interview.
-		<input checked="" type="checkbox"/> NO	
<u>P.9.9.2</u>		<input type="checkbox"/> YES	
-	<input checked="" type="checkbox"/> NO		
<u>P.9.9.4</u>	Does the project involve the risk of administering synthetic growth promoters, including hormones?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> 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]	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> No	
-		<input type="checkbox"/> NA	
<u>P.9.9.1</u>	limiting access for animals to basic needs like drinking water, adequate food, daylight, appropriate shelter etc.?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> POTENTIALLY	
-		<input type="checkbox"/> NO	
<u>P.9.9.3</u>	inadequate measures to isolate sick animals and control the spread of disease, especially zoonotic diseases?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> no	
-		<input type="checkbox"/> NA	
<u>P.9.9.5</u>	inadequate low-stress methods, equipment, and facilities that facilitate calm animal movement.	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> No	
-		<input type="checkbox"/> NA	
<u>P.9.9.6</u>	inadequate measures to ensure that animals are exposed to the least stress possible during transportation and slaughtering?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> No	
-		<input checked="" type="checkbox"/> NA	
<u>P.9.9.7</u>	inappropriate spacing per animal and stocking rates per land unit?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> No	
-		<input checked="" type="checkbox"/> NA	
<u>P.9.9.8</u>	inadequate measures to address the specific needs of aquatic animals?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> No	
-		<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> YES	
-		<input type="checkbox"/> No	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> 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
-		<input checked="" type="checkbox"/> NO	
<u>P.9.10.2</u>	Does the project in the project area or area of downstream impacts have risks to the following: native tree patches, individual native trees, freshwater resources (including	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	

	rivers, lakes, swamps, temporary water bodies, and wells), habitats of rare, threatened, and endangered species, and biodiversity-enhancing areas?		validation team during the remote audit and 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.			
<i>NA</i>			
Would the project involve or lead to:			
<u>P.9.10.1</u>	identified habitats as HCV areas and or Critical habitats?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> POTENTIALLY	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> NO	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> No	
-		<input type="checkbox"/> NA	
<u>P.9.10.3</u>	If the answer to above question is "yes", does the project has opportunities to minimise unwarranted conversion or degradation of the habitat and to enhance the habitat as part of its development?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> No	
-		<input type="checkbox"/> NA	
<u>P.9.10.4</u>		<input type="checkbox"/> YES	

-	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?	<input checked="" type="checkbox"/> No	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
-		<input type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input checked="" type="checkbox"/> NO	
If the answer to question above is "yes," please explain project situation and how the project will ensure compliance with applicable requirements.			The PD does not identify any risk against the defined principle. The justification provided by the PP was found acceptable and was confirmed by the validation team during the remote audit and interview.
<i>NA</i>			
Would the project involve or lead to:			
<u>P.9.11.2</u>	distortion of habitats of endangered species?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> Potentially	
-		<input checked="" type="checkbox"/> NA	
<u>P.9.11.2</u>	If answer to the above question is "yes", does the project plan to protect and enhance them?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input type="checkbox"/> NO	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> NO	
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> 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 validation team during the remote audit and interview.
-		<input checked="" type="checkbox"/> 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?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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.	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> NO	
<u>P.9.12.2  </u>	risk of spreading alien species into areas in which they have not already been established?	<input type="checkbox"/> YES	
-		<input type="checkbox"/> POTENTIALLY	
-		<input checked="" type="checkbox"/> 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			
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1[1] Basic services requirements refer to minimum space, supply of water, adequate sewage and garbage disposal system, appropriate protection against heat, cold, damp, noise, fire, and disease-carrying animals, adequate sanitary and washing facilities, ventilation, cooking and storage facilities and natural and artificial lighting, and in some cases basic medical services.

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