

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



Project Title:	100.5 MW Wind Power Project in Madhya Pradesh, India
Monitoring Period:	01/01/2021 to 31/12/2022 (Both days included)
GS project ID:	GS 3969
Internal ID:	9823
Customer:	Infinite Environmental Solutions LLP (PP: Orange Mamatkhedha Wind Private Limited)
Date:	29/06/2024
Revision:	03

SUMMARY			
Reference No.	Date (first version)	Version No.	Date (last version)
A+SH_SYST_TQC_GS_VER_9823	14/12/2023	03	29/06/2024
GS4GG Verification			
GS4GG Certified Product (sought):		GS VER	
GS4GG SDG Impact Statement (sought):		Impact Certification	
General Information			
Client	Infinite Environmental Solutions LLP		
Project Title	100.5 MW Wind Power Project in Madhya Pradesh, India		
Project Participants	Orange Mamatkhedha Wind Private Limited		
Project Location	Village: Bagiya, Kanser, Mawta, Nandwell, Ranigaon, Thikriya, Bhandariya, Bhepur, Chandakhedi, Dehari, Dhandhoda, Garoda, Karju and Sagwali districts: Ratlam & Mandsaur, Madhya Pradesh in India.		
Contact Person	Mr. Murali Krishnam Raju M		
Monitoring Period:	01/01/2021 to 31/12/2022 (Both days included) 01/01/2021 – 31/12/2021 (06 th MP of 1 st CP) 01/01/2022 – 31/12/2022 (01 st MP of 2 nd CP)		
GS4GG Version: GS4GG Principles and Requirements 1.2 GS4GG Activity Requirements: RE Activity Requirements, version 1.4 Applied Methodology Version: ACM0002 “Grid-connected electricity generation from renewable sources” Version 16.0 & version 20.0		GS4GG Sectoral Scope: 2 UNFCCC CDM Sectoral Scope: 1 Technical Area: 1.2	
Monitoring Report Version: 01 Date: 19/05/2023		Final Monitoring Report Version: 05 Date: 20/05/2024	
Certified Project Design Document Version: Assessment team checked the registered GS PDD of both 1 st and 2 nd crediting period: - 1 st crediting period: GS PDD version 02, date: 21/12/2015 2 nd crediting period: GS RCP PDD version 04, Date: 31/08/2022			
Estimated values for all SDG:			
SDG	SDG	Values (MP covering under 1 st crediting period)	Values (MP covering under 2 nd crediting period)
7	Renewable Electricity Generated	180,478 MWh electricity generation	180,478 MWh electricity generation
8	Trainings provided to O&M staff	01 Trainings provided to O&M Staff	01 Trainings provided to O&M Staff
8	Income generation	93.8 Lakh INR/year	NA (No estimation provided in PDD or Transition annex)
8	Number of Jobs generated	89 employments	15 employments
13	Emission Reduction	176.331 tCO ₂	167.934 tCO ₂

SUMMARY

Actual values for the Monitoring period for all SDG:

SDG	SDG	Actual values for monitoring period 01/01/2021 to 31/12/2021 (1 st crediting period)	Actual values for monitoring period 01/01/2022 to 31/12/2022 (2 nd crediting period)
7	Renewable Electricity Generated	191,132.01 MWh electricity generation	182,582 MWh electricity generation
8	Trainings provided to O&M staff	41 Trainings provided to O&M Staff	39 Training provided to O&M Staff
8	Number of Jobs generated	83 employments created	83 employments created
8	Income generation	125.70 Lakh INR	131.98 Lakh INR
13	Emission Reduction	186,735 tCO ₂ emission reduction	169,892 tCO ₂ emission reduction

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

Verification Summary

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by Orange Mamatkhedha Wind Private Limited to perform the 6th verification of the 1st Crediting period and 1st verification of the 2nd crediting period simultaneously of "100.5 MW Wind Power Project in Madhya Pradesh, India" (Ref. No. GS 3969) applying the methodology ACM0002, Version 16.0 & 20.0^{4/}.

The management of 'Orange Mamatkhedha Wind Private Limited' is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions.

A desk review and a site visit has been conducted to verify the data submitted in the monitoring report. Applus+ Certification confirms the following have been reviewed:

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

Orange Mamatkhedha Wind Private Limited is the promoter of the project activity and the project activity envisages implementation of a 100.5 MW wind power project in Madhya Pradesh, India, consisting of 67 WTGs of individual capacity 1.5 MW, sourced from Class ReGenV87 make. Electricity generated from the project activity is sent to Indian grid. As per GS4GG PDD^{3/}, VVB team verified that for monitoring period (01/01/2021 to 31/12/2022) the project activity replaces anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 176,331 tCO₂ for 1st CP covering MP (01/01/2021 to 31/12/2021) and 167,934 tCO₂ 2nd CP covering MP of (01/01/2022 to 31/12/2022), thereon displacing 180,478 MWh (1st CP) and 180,478 MWh (2nd CP) amount of electricity from the generation-mix of power plants connected to the Indian electricity grid, which is mainly dominated by thermal/ fossil fuel-based power plant.

The current monitoring period (01/01/2021 to 31/12/2022) cover under two different crediting period i.e., 1st and 2nd. Crediting period wise segregation provided in below table: -

Crediting Period	Monitoring Period
1 st Crediting Period 01/01/2015 to 31/12/2021	01/01/2021 to 31/12/2021

SUMMARY

2 nd Crediting Period 01/01/2022 to 31/12/2026	01/01/2022 to 31/12/2022
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The project activity was commissioned in five phases, Detail are as follows: -

Project Investor	Location of WTGs	Project Capacity	Date of Commissioning	Usage
Orange Mamatkheda Wind Private Limited	RM_01 RM_43	1.5 MW X 67 (Total capacity 100.5 MW)	28/04/2015	Sale to Indian Grid
	RM_02 RM_03 RM_04 RM_05 RM_06 RM_07 RM_08 RM_09 RM_10 RM_11 RM_12 RM_13 RM_16 RM_18 RM_19 RM_20 RM_21 RM_22 RM_25 RM_26 RM_28 RM_29 RM_33 RM_34 RM_36 RM_37 RM_38 RM_39 RM_41 RM_42 RM_44 RM_45 RM_48 RM_49		05/04/2015	
	RM3_01 RM3_02 RM3_03 RM3_08 RM3_09 RM3_10 RM3_11 RM3_13 RM3_14 RM3_16 RM3_17 RM3_18		20/08/2014	

SUMMARY					
	RM3_19 RM3_22 RM3_23 RM3_28 RM3_30 RM3_32 RM3_33 RM3_34 RM3_35 RM3_39 RM3_41 RM3_42				
	RM3_12 RM3_40		25/08/2014		
	RM3_43 RM3_44 RM3_45 RM3_46 RM3_48		07/11/2014		

The monitoring of emission reduction and sustainable development indicators has been carried out in accordance to respective registered PDD version 02(1st CP) and RCP PDD version 04(2nd CP) ^{/3/}.

Applus+ Certification confirms that the project is implemented in accordance with the validated and registered PDD^{/3/}. The monitoring plan complies with the applied methodology ACM0002, Version 16.0 & 20.0^{/4/} and the GS4GG guideline the monitoring has been carried out in accordance with the monitoring plan. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the projects GHG emissions and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information reviewed and evaluated Applus+ Certification confirms that the implementation of the project has resulted in 356,627 tCO₂ (186,735 tCO₂ for 1st CP and 169,892 tCO₂ for 2nd CP) emission reductions during period 01/01/2021 to 31/12/2022 (Both days included).

All CARs /CRs/ FARs raised during verification shall be resolved prior to submitting a request for issuance. Forward Action Requests (FARs) may be raised during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period.

Please refer Appendix 1 of this report. Total numbers of CARs: 05, CLs: 03, FARs: 00

ASSESSMENT TEAM		
Team Members	Type of Resource ¹	Organization (for OEs)
Lead Auditor, Verifier & GS Approved Auditor: Dr. Atul Takarkhede	☐ IR ☐ EI ☒ OE	M/s True Quality Certifications Private Limited
Technical Expert: Dr. Atul Takarkhede	☐ IR ☐ EI ☒ OE	M/s True Quality Certifications Private Limited
LAI T: Mr. Ishan Shrivastava	☐ IR ☐ EI ☒ OE	M/s True Quality Certifications Private Limited
OBS: Mr. Khagesh Sharma	☐ IR ☐ EI ☒ OE	M/s True Quality Certifications Private Limited

¹ IR (Internal Resource); EI (External Individual); OE (Outsourced Entity)

ASSESSMENT TEAM		
Team Members	Type of Resource ¹	Organization (for OEs)
Technical Reviewer: Mr. David Lubanga	☐ IR ☒ EI ☐ OE	Applus+ Certification

Note: In line with the GS Rule Update RU 2020 PR – PR V1.2 dated on 17/09/2020, the VVB hereby discloses that the TÜV SÜD South Asia Private Limited has performed RCP Validation of this project.

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

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1. INTRODUCTION

1.1 Objective

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by Orange Mamatkhedha Wind Private Limited to perform the 6th verification of the 1st Crediting period and 1st verification of the 2nd crediting period of “100.5 MW Wind Power Project in Madhya Pradesh, India” applying the methodology ACM0002, Version 16.0 & 20.0^{/4/} and GS4GG guideline. Gold Standard projects must undergo periodic audits and verification of emission reductions as the basis for issuance of Gold Standard VERs.

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

- Ensure that the project activity has been implemented and operated as per the registered PDD and that all physical features (technology, project equipment, monitoring and metering equipment) of the project are in place;
- Ensure that the published MR and other supporting documents provided are complete, verifiable and in accordance with applicable CDM validation and verification standard for project activities, Version 03.0^{/5/} and GS4GG Validation and Verification Standard Version 01.0^{/05/} for the project activities and Gold Standard (i.e., applicable GS4GG requirements);
- Ensure that the actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology;
- Evaluate the data recorded and stored as per the ACM0002, Version 16.0 & 20.0^{/4/}.

1.2 Scope

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

Based on the requirements in the CDM validation and verification standard for project activities, Version 03.0 and and GS4GG validation and verification standard version 1.0^{/05/} for the project activities as well as the GS4GG guidelines, Applus+ Certification has applied a rule-based approach for the verification of the project. The principles of accuracy, completeness, relevance, reliability, and credibility were combined with a conservative approach to establish a traceable and transparent verification opinion.

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

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

1.3 Description of the project activity

Orange Mamatkhedha Wind Private Limited is the promoter of the project activity and involves installation of the 100.5 MW wind power project in Ratlam & Mandsaur districts of Madhya Pradesh State of India. Consisting of 67 WTGs of individual capacity 1.5 MW, sourced from Class ReGenV87 make. The total capacity of the project activity is 100.5 MW. Electricity generated from the project activity is sent to Indian grid of India. Same was verified during the site visit. As per GS4GG PDD, version 02 and PDD version 04^{3/} project activity replaces anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 176,331 tCO₂ for 1st CP covering MP (01/01/2021 to 31/12/2021) and 167,934 tCO₂ 2nd CP covering MP of (01/01/2022 to 31/12/2022), thereon displacing 180,478 MWh (1st CP) and 180,478 MWh (2nd CP) amount of electricity from the generation-mix of power plants connected to the Indian electricity grid, which is mainly dominated by thermal/ fossil fuel-based power plant.

The details of the project are mentioned in the table:

S. No	Investor	WTG ID	Commissioning date	Capacity	Latitude (N)	Longitude (E)
1	Orange Mamatkhedha Wind Private Limited	RM_01	28/04/2015	1.5 MW	23° 44' 28.075"	74° 58' 17.419"
2		RM_02	05/04/2015	1.5 MW	23° 46' 2.550"	74° 57' 0.942"
3		RM_03	05/04/2015	1.5 MW	23° 45' 50.778"	74° 56' 56.742"
4		RM_04	05/04/2015	1.5 MW	23° 45' 44.175"	74° 56' 52.646"
5		RM_05	05/04/2015	1.5 MW	23° 45' 31.851"	74° 56' 53.004"
6		RM_06	05/04/2015	1.5 MW	23° 45' 20.438"	74° 56' 52.126"
7		RM_07	05/04/2015	1.5 MW	23° 45' 13.024"	74° 56' 51.705"
8		RM_08	05/04/2015	1.5 MW	23° 45' 5.869"	74° 56' 50.400"
9		RM_09	05/04/2015	1.5 MW	23° 44' 48.409"	74° 56' 53.869"
10		RM_10	05/04/2015	1.5 MW	23° 44' 40.539"	74° 56' 51.258"
11		RM_11	05/04/2015	1.5 MW	23° 44' 33.286"	74° 56' 47.552"
12		RM_12	05/04/2015	1.5 MW	23° 45' 41.015"	74° 58' 44.783"
13		RM_13	05/04/2015	1.5 MW	23° 45' 29.701"	74° 59' 0.506"
14		RM_16	05/04/2015	1.5 MW	23° 45' 0.957"	74° 59' 7.999"
15		RM_18	05/04/2015	1.5 MW	23° 44' 53.801"	74° 58' 49.207"
16		RM_19	05/04/2015	1.5 MW	23° 44' 40.957"	74° 58' 53.907"
17		RM_20	05/04/2015	1.5 MW	23° 44' 30.029"	74° 58' 36.282"

S. No	Investor	WTG ID	Commissioning date	Capacity	Latitude (N)	Longitude (E)
18		RM_21	05/04/2015	1.5 MW	23° 44' 16.855"	74° 58' 12.264"
19		RM_22	05/04/2015	1.5 MW	23° 44' 10.581"	74° 58' 20.178"
20		RM_25	05/04/2015	1.5 MW	23° 44' 45.641"	75° 0' 49.350"
21		RM_26	05/04/2015	1.5 MW	23° 45' 8.242"	74° 59' 40.994"
22		RM_28	05/04/2015	1.5 MW	23° 44' 21.253"	75° 0' 46.839"
23		RM_29	05/04/2015	1.5 MW	23° 44' 13.059"	75° 0' 50.582"
24		RM_33	05/04/2015	1.5 MW	23° 45' 57.626"	74° 58' 12.594"
25		RM_34	05/04/2015	1.5 MW	23° 45' 15.104"	74° 59' 42.831"
26		RM_36	05/04/2015	1.5 MW	23° 45' 18.452"	74° 59' 29.123"
27		RM_37	05/04/2015	1.5 MW	23° 45' 35.434"	74° 57' 10.526"
28		RM_38	05/04/2015	1.5 MW	23° 45' 49.225"	74° 57' 22.745"
29		RM_39	05/04/2015	1.5 MW	23° 45' 45.789"	74° 56' 18.906"
30		RM_41	05/04/2015	1.5 MW	23° 45' 55.547"	74° 56' 25.826"
31		RM_42	05/04/2015	1.5 MW	23° 45' 23.728"	74° 57' 10.318"
32		RM_43	28/04/2015	1.5 MW	23° 47' 32.845"	74° 59' 21.058"
33		RM_44	05/04/2015	1.5 MW	23° 47' 29.747"	74° 58' 12.750"
34		RM_45	05/04/2015	1.5 MW	23° 47' 36.152"	74° 58' 6.070"
35		RM_48	05/04/2015	1.5 MW	23° 47' 39.118"	74° 58' 44.623"
36		RM_49	05/04/2015	1.5 MW	23° 47' 43.316"	74° 59' 23.990"
37		RM3_01	20/08/2014	1.5 MW	23° 50' 29.519"	74° 57' 14.203"
38		RM3_02	20/08/2014	1.5 MW	23° 50' 37.583"	74° 57' 11.973"
39		RM3_03	20/08/2014	1.5 MW	23° 50' 45.583"	74° 57' 15.470"
40		RM3_08	20/08/2014	1.5 MW	23° 50' 32.270"	74° 58' 39.328"
41		RM3_09	20/08/2014	1.5 MW	23° 50' 21.832"	74° 58' 37.456"
42		RM3_10	20/08/2014	1.5 MW	23° 50' 6.553"	74° 59' 14.328"
43		RM3_11	20/08/2014	1.5 MW	23° 50' 25.804"	74° 59' 32.992"
44		RM3_12	25/08/2014	1.5 MW	23° 50' 48.892"	74° 59' 48.864"
45		RM3_13	20/08/2014	1.5 MW	23° 50' 46.517"	74° 59' 20.122"
46		RM3_14	20/08/2014	1.5 MW	23° 51' 3.231"	74° 59' 30.267"

S. No	Investor	WTG ID	Commissioning date	Capacity	Latitude (N)	Longitude (E)
47		RM3_16	20/08/2014	1.5 MW	23° 51' 6.901"	74° 58' 44.060"
48		RM3_17	20/08/2014	1.5 MW	23° 51' 23.579"	74° 58' 21.783"
49		RM3_18	20/08/2014	1.5 MW	23° 51' 31.349"	74° 58' 18.175"
50		RM3_19	20/08/2014	1.5 MW	23° 51' 1.759"	74° 58' 16.979"
51		RM3_22	20/08/2014	1.5 MW	23° 51' 51.604"	74° 58' 0.138"
52		RM3_23	20/08/2014	1.5 MW	23° 51' 25.764"	74° 59' 13.401"
53		RM3_28	20/08/2014	1.5 MW	23° 52' 5.757"	74° 58' 51.263"
54		RM3_30	20/08/2014	1.5 MW	23° 52' 22.990"	74° 58' 41.855"
55		RM3_32	20/08/2014	1.5 MW	23° 51' 59.161"	74° 59' 53.317"
56		RM3_33	20/08/2014	1.5 MW	23° 52' 14.671"	75° 0' 15.699"
57		RM3_34	20/08/2014	1.5 MW	23° 52' 24.199"	75° 0' 11.174"
58		RM3_35	20/08/2014	1.5 MW	23° 50' 51.456"	74° 58' 50.107"
59		RM3_39	20/08/2014	1.5 MW	23° 51' 51.292"	75° 0' 0.743"
60		RM3_40	25/08/2014	1.5 MW	23° 51' 1.443"	74° 59' 57.136"
61		RM3_41	20/08/2014	1.5 MW	23° 49' 57.904"	74° 59' 28.398"
62		RM3_42	20/08/2014	1.5 MW	23° 49' 42.687"	74° 59' 32.712"
63		RM3_43	07/11/2014	1.5 MW	23° 53' 28.641"	74° 58' 41.490"
64		RM3_44	07/11/2014	1.5 MW	23° 53' 41.388"	74° 58' 41.630"
65		RM3_45	07/11/2014	1.5 MW	23° 53' 52.021"	74° 58' 44.457"
66		RM3_46	07/11/2014	1.5 MW	23° 54' 1.191"	74° 58' 44.809"
67		RM3_48	07/11/2014	1.5 MW	23° 54' 27.171"	74° 58' 42.683"

The monitoring of emission reduction and sustainable development indicators has been carried out in accordance to respective registered PDD version 02 (1st CP) and RCP PDD version 04 (2nd CP).

2. **METHODOLOGY**

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

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant;

- Protocols used to estimate or measure GHG emissions from these sources;
- Collection and handling of data;
- Controls on the collection and handling of data;
- Means of verifying reported data; and
- Compilation of the monitoring report.

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

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

2.1 Appointment of the assessment team

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

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

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

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

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

Name	Role	SS Coverage	TA Coverage	Financial aspect	Host country experience
Dr. Atul Takarkhede	LA/TE	YES	YES	NA	YES
Mr. Ishan Shrivastava	LAiT	NO	NO	NA	YES

Mr. Khagesh Sharma	OBS	NO	NO	NA	YES
Mr. David Lubanga	TR	YES	YES	NA	NA

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

2.2 Document review

The Monitoring Report version 01^{1/} was submitted to VVB before the verification activities started. The MR was assessed based on all the relevant documents. The aim of the assessment in the desk review was to:

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

2.3 On site assessment and follow up interviews

In the context of verification, the GS4GG principles and requirements version 1.2, para 5.1.26 requires VVB conducted a site visit (21/07/2023 and 22/07/2023), including the assessment of the monitoring report and all supporting evidence and documents included by the Project Developer to demonstrate conformity. Further, VVB onsite team has taken verbal consent for the interviewees for the inclusion of their names in the Verification report which is any public document and available on GS portal publicly. All the interviewees given their consent for the same hence below details of the various stakeholders provided here inline with the para 9.7.2 (e) of GS Validation and Verification Standard V1.0.

Project Location: - Mandsaur and Ratlam District, Madhya Pradesh, India.						
No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1	Agrawal	Mr. Manish	PP representative	21/07/2023 and 22/07/2023 (Onsite)	Project implementation,	LA : Dr. Atul Takarkhede LAI T : Ishan Shrivastava
2	Saini	Mr. Ghanshyam	Senior Manager (O&M)		Project implementation, Grievance mechanism etc.	
3	Paliwal	Mr. Parikshit	Manager			
3	Mondal	Mr. Abhishek	Infinite Solutions		Baseline emissions, ER calculations,	

Project Location: - Mandsaur and Ratlam District, Madhya Pradesh, India.						
No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
					Sustainable monitoring,	
4	Sharma	Mr. Amit	Local stakeholder		Stakeholder meeting- Employment opportunities, Standard of Livings etc.	
5	Patidar	Mr. Ramesh	Local stakeholder			

The objective of the on-site assessment is to:

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

Name of the stakeholder	Amit Sharma
Occupation	Villager
VVB QUESTION: Did PP provided employment opportunity to locals? Answer: Yes, employment is generated and the locals are given priority. Assessment team noted that locals were employed for the project activity for the current monitoring period. VVB also like to conclude that during the site visit it was observed that local people were employed for security and operation related work like vegetation improvement and other unskilled work. VVB	

also found that skilled local persons were also employed by the organization for the operation and maintenance of the power plant.

Name of the stakeholder	Ramesh Patidar
Occupation	Villager
VVB questions: Did the power plant have any harmful impact on farming or vegetations? Answer: NO. The plant is implemented in barren land and there were no any fertile land or crop which is damaged.	

2.4 Quality of evidences

Sufficient evidence covering the full verification period in the required frequency is available to verify the figures stated in the final MR Version 04^{2/}. Specific cross-checks have been done in cases that further sources were available. The monitoring report's figures were checked by the assessment team against the raw data. The data collection system meets the requirements of the monitoring plan as per the methodology.

2.5 Reporting of findings

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

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

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

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

All CARs /CLs raised during verification & any FARs raised by Sustain-Cert during design/previous performance reviews shall be resolved prior to submitting a request for issuance.

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

Please refer Appendix 1 of this report. Total numbers of CARs: 05, CLs: 03, FARs: 00.

2.6 Internal Quality Control

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

3. VERIFICATION FINDINGS

3.1 FARs from Validation / Previous Verification

This is 6th verification of the 1st Crediting period and 1st verification of the 2nd crediting period for the project activity. No FAR pending from the validation and previous verification of the project activity.

3.2 Project Implementation in accordance with the registered Project Design Document

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

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

- Interviews of onsite personnel during Site Visit
- Technical detail analysis of the power plant from the documents submitted by the manufacturer.
- Commissioning certificates of the plant
- PPA for the project activity
- Orange Mamatkhedha Wind Private Limited has installed 100.5 MW Wind power plant at Bagiya, Kansar, Mawta, Nandwell, Ranigaon, Thikriya, Bhandariya, Bhepur, Chandakhedi, Dehari, Dhandhoda, Garoda, Karju and Sagwali, villages of Ratlam & Mandsaur districts of Madhya Pradesh in India with capacity of 100.5 MW.

POWER	
Rated power	1500 kW
Cut-in wind speed (10 min.	3 m/s
Rated Wind Speed (10 min.	Approx. 12.5 m/s
Cut-out wind speed (10 min.	22 m/s
Survival wind speed	52.5 m/s
Generator	Variable Speed, Multi-pole Synchronous with Permanent Magnet Excitation
ROTOR	
Diameter	86.7 m
Swept area	5325 m ²

Speed range (variable)	9 to 17.3 rpm
TOWER AND FOUNDATION	
Hub height	85 m
Design	Tubular, Four sections
Foundation type	Floating foundation
CONTROL AND SAFETY SYSTEMS	
Control of output	Pitch Regulation
Speed control	Variable, Micro-controller based
Low Voltage Ride Through	3 seconds
Primary brake system	Aerodynamic Brake, Single Pitch Control/triple redundant
Pitch System	Electromechanical, Maintenance Free Toothed Belt Drive (Patented)
Remote Monitoring	VPN, Visualization via web-browser

Technical specifications of the WTGs are provided in the section B.1 of the MR. Same are conformed during the onsite visit and commissioning certificates^{/11/}, RCP validation report & previous verification reports^{/03/} and found correct.

The project activity commissioning details are described in the 1.3 section of this report which is verified with commissioning certificate issued by the government authority i.e., M.P. Power Transmission CO. Ltd and found the same to be appropriate.

The project activity was in normal operational during the monitoring period and the same has been confirmed during site visit interviews with PP and crosschecked from review of Joint Meter Reading^{/9/} & breakdown^{/12/} records submitted by PP. Power plant was working throughout the monitoring period and same have been conformed from Joint Meter Reading^{/9/} values. No unusual activities observed during the monitoring period and plant was undergone scheduled as well as emergency maintenance as per the recommendation of the manufacturers. No forced breakdown^{/12/} observed and the same is confirmed by the assessment team with the plant log details and Joint Meter Reading^{/9/}.

The verification team has reviewed the commissioning certificates & PPA to conclude that the capacity of the project is same as mentioned in the registered GS PDD and explained by PP during site visit interviews. The capacity of the project activity does not change after the registration of the project activity and same have been confirmed from the commissioning certificate, PPA^{/17/} and Joint Meter Reading issued by State Utility^{/9/} and Invoices raised by the PP towards state utility.

Also, from review of other documents such as Commissioning certificate^{/11/}, PPA^{/17/} & Joint Meter Reading^{/9/}, it was observed that the rated capacity of the project is 100.5 MW. The capacity of the project is more than 15 MW and thus the same qualifies as large-scale project activity.

Plant is located at Bagiya, Kansar, Mawta, Nandwell, Ranigaon, Thikriya, Bhandariya, Bhepur, Chandakhedi, Dehari, Dhandhoda, Garoda, Karju and Sagwali, villages of Ratlam & Mandsaur districts of Madhya Pradesh India. Assessment team also checked the locations of the project activity in the registered PDD VERSION 02 (1st CP) and RCP PDD VERSION 04 (2nd CP)^{/3/}, RCP validation report^{/3/}. Thus, location provided in MR are found in line with registered documents of the project activity and are as stated in table above.

The project is connected to Indian grid (as per the grid structure of India) and the same is found correct by the assessment team during the review of commissioning certificate, PPA and site visit interviews with PP. The grid structure as mentioned in the PDD is still applicable for the project and ex-ante emission factor as proposed in the PDD is used for emission reduction calculation.

Assessment team noted that the project activity has entered a power purchase agreement with the MPPCL^{/17/}. The electricity is fed in the Integrated Indian grid.

Thus, assessment team confirms that the project is implemented as per the registered PDD version 02 (1st CP) and RCP PDD version 04 (2nd CP)^{/03/} and no change in project design is envisaged for the present monitoring period.

The amount of GS-VERs achieved during the monitoring period (01/01/2021 to 31/12/2021) are 5.90 % higher than the estimated value in the GS4GG PDD. The amount of GS-VERs achieved during the monitoring period (01/01/2022 to 31/12/2022) are 1.17 % higher than the estimated value in the GS4GG PDD. This is due to the variability of wind and planned maintenance of the WTGs during the monitoring period, this is also not in control of Project Owner and maintenance is an essential aspect of efficient operations of WTG, it was thus accepted.

Assessment team also checked the metering details of the connected WTGs and found the same to be appropriate. Feeder details were confirmed with onsite visit, and commissioning certificate submitted by PP.

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

Assessment team also checked the other registry like UNFCCC and VCS and found that project is not registered with UNFCCC and VCS. The emission reductions achieved and issued during this regime was mentioned in the earlier part of this section.

There are no framework/policies defined by host country government for the registered projects under various carbon credit schemes till date for NDC targets. Thus, project is not part of the NDC target and same was confirmed from the review of government policies and initiatives taken. Thus accepted.

Also, PP has provided revised declaration for No Double Counting of the ERs dated 06/05/2024 and thus it was concluded that project is avoided double counting of the ERs^{/22/}.

Grievance Mechanism:

During the Onsite visit, the verification team confirmed that there is a grievance book/form with GS contact information at the project site office and are accessible to local stakeholders. By checking grievance book submitted by PP, it was able to confirm there are no comments received from the local people for the present monitoring period towards project activity. However, some complaints raised by the on-roll & contract labours are recorded and resolved. VVB found in the submitted Grievance register those grievances like salary issue of the Employment, donation for Temple and Bricks amount due are raised during the complete monitoring period, year 2021 and 2022 which are successfully resolved by the grievance cell. Same was confirmed during site visit. Local people are happy with the implementation of the project activity as it entrusts employment and improve living standard of local people and villagers^{/15/}. No legal contest or dispute has arisen during this monitoring period which was verified during interviews with PP & stakeholders.

Materiality adopted in Verification:

Consideration of materiality in planning the verification

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

Consideration of materiality in conducting the verification

In line with Guidelines for Application of materiality in verifications, version 02 the verification team has conducted a complete verification of all the information presented in the monitoring report and data monitored as presented in the emission reduction calculation spread sheet. It invoices follows the paper trail back to the raw data such as meter reading records and invoices.

Emission Reductions (tCO ₂ e)/year	500,000 or more	300,000 to 500,000	300,000 or less	Micro Scale projects
Materiality Threshold para (9.6.3) of Validation-and-Verification-Standard version 1.0	0.5%	1.0%	2.0%	10.0%

Materiality threshold is 2.0 % for project activity as achieved annual ERs are less than 300,000 tCO₂e/year as per requirement of V1.0_PAR_Validation-and-Verification-Standard.

Particulars / Monitoring Report	MR Version (Initial)	MR Version (Revised/Final)
Emission Reductions Achieved (tCO ₂ e) in this monitoring period	191,266 tCO ₂ e (For 1 st CP) 182,758 tCO ₂ e (For 2 nd CP)	191,132 tCO ₂ e (For 1 st CP) 182,582 tCO ₂ e (For 2 nd CP)
Applicable Threshold (%) as per para 9.6.3 of Validation-and-Verification-Standard version 1.0	2.0%	2.0%

The verification team has identified the impact of errors observed and those were corrected by PP during verification for all monitoring parameters at the individual level for the CAR/CL/s raised. There are no material errors, overestimation of ER, omission, or misstatement.

3.3 Compliance of the Monitoring Plan with the Monitoring Methodology

The verification team can confirm that the monitoring plan is in accordance with the approved methodology ACM0002, Version 16.0 & 20.0^{4/}, applied by the proposed GS project activity.

VVB found that there are two approved deviations from GS4GG with deviation no. COVID_DEV_267 dated 17/06/2022 and DEV_525 dated 20/09/2023.

COVID_DEV_267: PD requested permanent deviation from GS4GG principles and requirement section 5.1.46 regarding delay in design certification renewal so as to obtain full credits for the 2nd crediting period of the project (01/01/2022 to 31/12/2026). VVB verified this deviation through the Deviation request form version 4.0 is available on the GS-website. This deviation is approved by the Sustain Cert on 17/06/2022 which does not affect the additionality of the project. During the site visit assessment team noted that there was no change in the monitoring plan for the delayed period for RCP. The monthly electricity export & import is monitored through JMR which is carried out by state utility. There are no changes in the procedure were noted. Further, assessment team also confirmed that there no changes in the monitoring procedures of other SDG parameters. Assessment team verified the JMRs, Invoices & other plant records like daily attendance records, salary slips, O&M agreement, bird hit records, waste handling & disposal records etc. to confirm the same. Hence, accepted to the VVB team.

DEV_525 : PD requested temporary deviation from the approved monitoring plan, deviation from GS4GG principles and requirement, section 5.1.39 " *Transparent, annual update reports need to be provided for Projects that have achieved the Project Design Certification stage or have successfully transitioned to Gold Standard for the Global Goals. An annual report shall be submitted for each monitoring year by end of next calendar year for which verification is not completed. If a verification is in progress but not completed, then an Annual Report is still required by the end of calendar year*" but it was missed and deviation was applied for the monitoring period 01/01/2021–31/12/2022 and it is approved by Sustain Cert on 25/09/2023 and PD ensures that Annual Reports are submitted each year and latest by end of the following year of a monitoring period as stipulated in PRINCIPLES & REQUIREMENTS -Version 1.2 & 5.1.39 to 5.1.44. PD has submitted the annual report dated 20/09/2023 for the monitoring period (01/01/2021–

31/12/2022) and PD confirms to VVB assessment team on submission of these annual report to GS4GG in order to comply with GS4GG guidelines.

3.4 Completeness of Monitoring

The monitoring has been carried out in accordance with the monitoring plan contained in the GS PDD^{/3/}. All parameters were monitored and determined as per the monitoring plan of the GS PDD as follows:

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

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

The values considered ex-ante for this monitoring period were cross-checked with registered PDD version 02 (1st CP) and PDD version 04 (2nd CP)^{/03/}, and their respective sources. The summary of all the ex-ante parameters has been given below:

Fixed ex ante parameter for 1st Crediting period: -

Parameter/ Description	Value applied	MoV
SDG 13: Climate Action	0.9862 tCO ₂ /MWh	The value of the parameter was checked from registered PDD version 02 ^{/1/} . The value of the parameter was sourced from CEA database version 10 ^{/4/} .
EF_{grid,OM,y} Operating Margin CO ₂ emission factor in year y		
SDG 13: Climate Action	0.9495 tCO ₂ /MWh	The value of the parameter was checked from registered PDD version 02 ^{/1/} . The value of the parameter was sourced from CEA database version 10 ^{/4/} .
EF_{grid,BM,y} Build Margin CO ₂ emission factor in year y		
SDG 13: Climate Action	0.9770 tCO ₂ /MWh	The value of the parameter was checked from registered PDD version 02 ^{/1/} . The value of the parameter was sourced from CEA database version 10 ^{/4/} .
EF_{grid,CM,y} Combined Margin CO ₂ emission factor in year y		

Fixed ex ante parameter for 2nd Crediting period:-

Parameter/ Description	Value applied	MoV
SDG 13: Climate Action	0.9522 tCO ₂ /MWh	The value of the parameter was checked from registered RCP PDD ^{/3/} . The value of the parameter was sourced from CEA database version 17 ^{/4/} .
EF_{grid,OM,y} Operating Margin CO ₂ emission factor in year y		
SDG 13: Climate Action	0.8653 tCO ₂ /MWh	The value of the parameter was checked from registered RCP PDD ^{/3/} . The value of the parameter was sourced from CEA database version 17 ^{/4/} .
EF_{grid,BM,y} Build Margin CO ₂ emission factor in year y		
SDG 13: Climate Action	0.9305 tCO ₂ /MWh	The value of the parameter was checked from registered RCP PDD ^{/3/} . The value of the parameter was sourced from CEA database version 17 ^{/4/} .
EF_{grid,CM,y} Combined Margin CO ₂ emission factor in year y		

The value mentioned in the Monitoring Report and Emission Reduction Spreadsheet are consistent with the registered PDD. The applied value is correct and justified.

b. Data and parameters monitored

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

Relevant SDG indicators = 7.2.1 Affordable and Clean Energy

1. **EG_{facility,y}**: Net Electricity supplied to the grid by the project activity in year y

Total 373,714.01 MWh amount of net electricity supplied to the grid.

The parameter EG_{facility,y} is calculated based on the difference between values of “export” “import”. The electricity exported and imported from the 220 KV pooling substation, Mamatkhedha metered using energy meters. A main and check meter is installed at every metering point/feeder for the project activity. There are four metering points/feeders for the project activity, on a monthly basis, a joint meter reading carried out in the presence of the MPPKVVCL officials and representatives of the project promoters. Each of the metering points connected to the nearest Mamatkhedha sub-station from where electricity is be exported to the grid.

The parameter is a calculated using the difference of export, import values measured from the energy meter. The primary source of data of the parameter is Share Certificate Issued by ReGen and JMR (Joint Meter Reading) issued by State utility, MPPKVVCL which provide input values EG_{facility,y}. The same is thus acceptable to the assessment team and thus emission reduction calculation is correct.

Crediting Period	Monitoring Period	EG _{facility,y}
1 st Crediting Period 01/01/2015 to 31/12/2021	01/01/2021 to 31/12/2021	191,132.01 MWh
2 nd Crediting Period (01/01/2022 to 31/12/2026)	01/01/2022 to 31/12/2022	182,582 MWh
-	01/01/2021 to 31/12/2022	Total = 373,714.01 MWh

Relevant SDG indicators = 13 Climate Action

2. **ER_y**: Emission reductions achieved per year.

During the current monitoring period total 356,627 tCO₂ (186,735 tCO₂ for 1st CP and 169,892 tCO₂ for 2nd CP) emission reduction achieved.

The parameter is calculated using product of electrical energy baseline EG_{facility,y} expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor. Same is demonstrated in Emission reduction sheet and achieved value of emission reduction for the current monitoring period (01/01/2021 to 31/12/2022) is 356,627 tCO₂. The same is thus acceptable to the assessment team and thus emission reduction calculation is correct.

Crediting Period	Monitoring Period	ER _y
1 st Crediting Period (01/01/2015 to 31/12/2021)	01/01/2021 to 31/12/2021	186,735 tCO ₂
2 nd Crediting Period ((01/01/2022 to 31/12/2026)	01/01/2022 to 31/12/2022	169,892 tCO ₂

Relevant SDG indicators = SDG 8: Decent work and Economic growth

3. **Quantitative employment and income generation:** Number of people employed directly due to the project activity and better salary given and salary from the o/m contract. The parameter is taken as the total 83 number of people employed directly due to the project activity and better salary given and salary from the o/m contract during current monitoring period. There are 83 staffs involved in the O&M including staffs from Greenko Mamtkheda (on roll), O&M team, Technicians (off roll) and Security Guards and no gender inequality in terms of salary has been observed, PP paying equal amount of money for equal work.

The monitoring period for 1st CP is 01/01/2021 to 31/12/2021 and the income generation applicable for all 67 WTGs of the project for this period is 125.70 Lakh INR as per the O & M Contract signed with ReGen Powertech Pvt. Ltd.

The monitoring period for 2nd CP is 01/01/2022 to 31/12/2022 and the income generation applicable for all 67 WTGs of the project for this period is 131.98 Lakh INR as per the O & M Contract signed with ReGen Powertech Pvt. Ltd. The same is thus acceptable to the assessment team and verified using Salary slips of the Employees, Attendance sheet and O&M Contract submitted.

4. **Quality of Employment:** Training provided to employees & O&M staff of the project

The parameter is taken as the total number of trainings conducted during the current monitoring period for the employees. 41 trainings (1st CP) and 39 trainings (2nd CP) are conducted at the project site during the current monitoring period. The same is thus acceptable to the assessment team and verified with provided training records^{07/} by PP.

c. Implementation of sampling plan

PP did not apply sampling plan to determine data and parameters monitored during this monitoring period. The verification team has checked all the documents such as Monthly Generation reports^{9/} issued by State electricity board /Invoices etc. and hence sampling plan was not required. The verification team hereby confirms that has checked all the documents.

d. Compliance with the calibration frequency requirements for measuring

instruments

The calibration details such as make, accuracy class serial number is as per the meter available onsite and checked during verification Site Visit interviews. The Calibration details are presented in Appendix 2 of this report. Calibration^{10/} of meters carried out by a NABL accredited company for testing and calibration, Govt of India (<http://www.nabl-india.org/>) to carry out calibration.

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

3.5 SDG Outcomes Monitoring

In the Registered PDD^{3/} indicators are chosen for the monitoring of sustainable monitoring:

Meth/tool	Relevant SDG indicator	GS PDD ^{03/} (1 st CP)	GS RCP PDD (2 nd CP)	MR	Compliance
Quantity of net electricity supplied to the grid	SDG 7.2.1: Renewable energy share in the total final energy consumption	Quantity of net electricity supplied to the grid during the year y.	Quantity of net electricity supplied to the grid during the year y.	Quantity of net electricity supplied to the grid during the year y.	Yes
Quantitative employment and Income generation Quality of employment	SDG 8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities. SDG 8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training.	Quantitative employment And Income generation Quality of employment	Quantitative employment And Income generation Quality of employment	Quantitative employment and Income generation Training provided to employees & O&M staff (Quality of Employment)	Yes
Take urgent action to combat climate change and its impacts	SDG 13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does	CO ₂ emission reduction due to implementation of the project activity	CO ₂ emission reduction due to implementation of the project activity	CO ₂ emission reduction due to implementation of the project activity	Yes

Meth/tool	Relevant indicator	SDG	GS PDD ^{/03/} (1 st CP)	GS RCP PDD (2 nd CP)	MR	Compliance
	not threaten food production					

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

Relevant SDG Indicator	SDG 7.2.1: Affordable and Clean Energy						
Data/parameter:	EG _{facility,y}						
Unit	MWh						
Description	Quantity of net electricity supplied to the grid during the year y.						
Source of data checked by the assessment team	Share Certificate Issued by ReGen and JMR (Joint Meter Reading) ^{/9/}						
Value(s) of monitored parameter	373,714.01 MWh (Period: 01/01/2021 to 31/12/2022) <table border="1"> <thead> <tr> <th>Monitoring Period Covered</th><th>EG_{facility,y}</th></tr> </thead> <tbody> <tr> <td>1st Crediting Period (01/01/2021 to 31/12/2021)</td><td>191,132.01 MWh</td></tr> <tr> <td>2nd Crediting Period 01/01/2022 to 31/12/2022</td><td>182,582 MWh</td></tr> </tbody> </table>	Monitoring Period Covered	EG _{facility,y}	1 st Crediting Period (01/01/2021 to 31/12/2021)	191,132.01 MWh	2 nd Crediting Period 01/01/2022 to 31/12/2022	182,582 MWh
Monitoring Period Covered	EG _{facility,y}						
1 st Crediting Period (01/01/2021 to 31/12/2021)	191,132.01 MWh						
2 nd Crediting Period 01/01/2022 to 31/12/2022	182,582 MWh						
Means of verification:	The parameter EG_{facility,y} is calculated based on the difference between values of "export" and "import". The electricity exported and imported from the sub-station metered using energy meters. A main and check meter is installed at every metering point/feeder for the project activity. There are four metering points/feeders for the project activity, on a monthly basis, a joint meter reading carried out in the presence of the state utility officials. Each of the metering points connected to the nearest sub-station from where electricity is be exported to the grid. The installed meters are of 0.2s accuracy class. The export and import reading are continuous and recording frequency is monthly. The QA/QC procedure is as per the requirement of the registered PDD^{/3/} and onsite practice. Assessment team confirms the same during the interviews with PP. Assessment team checked all the values of calculated Net electricity supplied to the grid from the Joint Meter Reading (provides the value of export and import) issued by State electricity board. Moreover, as per the requirement of the approved methodology and registered PDD, assessment team cross checked the net electricity value as presented in the Joint Meter Reading ^{/9/} with the invoice raised and found the values match with each other. The same is thus acceptable to the assessment team and thus emission reduction calculation are correct. The details of the Meters are provided in appendix 2 of the report.						
Cross check mechanism	The Joint Meter Reading is cross-checked with the invoice ^{/9/} copies. Emission reduction calculated in thus correct and accurate. The cross-check mechanism is presented in the emission reduction calculation sheet and the same is found correct.						

Relevant SDG Indicator	SDG 13.2.1: Climate Action
Data/parameter:	ER _y
Unit	tCO ₂
Description	CO ₂ emission reduction due to implementation of the project activity
Source of data checked by the assessment team	For 1 st CP it is calculated as per "Tool to calculate the emission factor for an electricity system,". The data are obtained from "CO ₂ Baseline

	Database for Indian Power Sector" version 10.0 ² , published by the Central Electricity Authority, Ministry of Power, Government of India. Similarly for 2 nd CP it is Calculated as per "Tool to calculate the emission factor for an electricity system,". The data are obtained from "CO ₂ Baseline Database for Indian Power Sector" version 17.0 ³ , published by the Central Electricity Authority, Ministry of Power, Government of India.						
Value(s) of monitored parameter	356,627 tCO ₂ (Period: 01/01/2021 to 31/12/2022) <table border="1"> <thead> <tr> <th>Monitoring Period Covered</th><th>ER_y</th></tr> </thead> <tbody> <tr> <td>1st Crediting Period ((01/01/2021 to 31/12/2021)</td><td>186,735</td></tr> <tr> <td>2nd Crediting Period (01/01/2022 to 31/12/2022)</td><td>169,892</td></tr> </tbody> </table>	Monitoring Period Covered	ER _y	1 st Crediting Period ((01/01/2021 to 31/12/2021)	186,735	2 nd Crediting Period (01/01/2022 to 31/12/2022)	169,892
Monitoring Period Covered	ER _y						
1 st Crediting Period ((01/01/2021 to 31/12/2021)	186,735						
2 nd Crediting Period (01/01/2022 to 31/12/2022)	169,892						
Means of verification:	Assessment team checked that the parameter is calculated. The electricity exported & imported measured by Energy meter installed at substation. The Joint Meter Reading ^{/9/} is cross-checked with the invoice ^{/9/} copies. Emission reduction calculated in thus correct and accurate.						
Cross check mechanism	All the formulas are applied in line with the registered GS4GG PDD						

Relevant SDG Indicator	SDG 8: Decent work and Economic growth								
Data/parameter:	Training provided to employees & O&M staff (Quality of Employment)								
Unit	Number of trainings								
Description	Trainings provided to employees & O&M staff ^{/07/}								
Source of data checked by the assessment team	Training Records								
Value(s) of monitored parameter	Total number of trainings is 80. Kindly review Appendix 4 for training details. <table border="1"> <thead> <tr> <th>Vintage Breakup</th><th>(SDG 08) no. of trainings</th></tr> </thead> <tbody> <tr> <td>01/01/2021 to 31/12/2021</td><td>41</td></tr> <tr> <td>01/01/2022 to 31/03/2022</td><td>39</td></tr> <tr> <td>Total</td><td>80</td></tr> </tbody> </table>	Vintage Breakup	(SDG 08) no. of trainings	01/01/2021 to 31/12/2021	41	01/01/2022 to 31/03/2022	39	Total	80
Vintage Breakup	(SDG 08) no. of trainings								
01/01/2021 to 31/12/2021	41								
01/01/2022 to 31/03/2022	39								
Total	80								
Means of verification:	The value for this parameter is taken from Plant records. Verification team interviewed some employees & local stakeholders.								
Cross check mechanism	Not applicable								

Relevant SDG Indicator	SDG 8: Decent work and Economic growth
Data/parameter:	Quantitative employment and income generation
Unit	1. INR for income generation or salary given to the employees 2. Number of employees involved in the project
Description	O & M Investment for the project activity for this monitoring period and number of people employed directly due to the project activity

² https://cea.nic.in/wp-content/uploads/baseline/2020/07/user_guide_ver10.pdf

³ https://cea.nic.in/wp-content/uploads/tpe_cc/2022/02/User_Guide_ver_17_2021.pdf

Source of data checked by the assessment team	Salary of the project employees, Attendance sheet, O&M Contract		
Value(s) of monitored parameter	Assessment team checked that for Quantity of employment. Employment is given in office work, O&M, Security etc. There are total of 83 employments. The employment records for the monitoring period are checked by the assessment team and found correct. The monitoring period for 1st CP is 01/01/2021 to 31/12/2021 and the income generation applicable for all 67 WTGs of the project for this period is 125.70 Lakh INR as per the O & M Contract signed with ReGen Powertech Pvt. Ltd. There are 83 staffs involved in the O&M including staffs from Greenko Mamtkheda (on roll), O&M team, Technicians (off roll) and Security Guards.		
	Vintage	Income generation (in Lakh INR)	Number of Employment generation
	01/01/2021 to 31/12/2021	125.70	83
	The monitoring period for 2nd CP is 01/01/2022 to 31/12/2022 and the income generation applicable for all 67 WTGs of the project for this period is 131.98 Lakh INR as per the O & M Contract signed with ReGen Powertech Pvt. Ltd. There are 83 staffs involved in the O&M including staffs from Greenko Mamtkheda (on roll), O&M team, Technicians (off roll) and Security Gaurds.		
	Vintage	Income generation (in Lakh INR)	Number of Employment generation
	01/01/2022 to 31/12/2022	131.98	83
Means of verification:	Therefore, the total income generation is 257.68 (in Lakh INR) and the total number of staffs employed for the Period 01/01/2021 to 31/12/2022 is 83. Moreover, Assessment team verified through salary slips that no discrimination made against female workers and same pay-out has been to both male and female as per their pay scale. Kindly review Appendix 4 for training details.		
	The value for number of employments created is taken from employment records and salary slips^{13/}. The number of persons employed would be mentioned in the plant register, which can be crossed checked with daily attendance register. Verification team interviewed some employees and Local stakeholders.		
Cross check mechanism	Not applicable		

Safeguarding Principle	4.2.2: Erosion and/or Water Body Instability
Data/parameter:	Soil Erosion
Unit	-
Description	General soil erosion and sediment control measures would

	include: • Keep open areas of excavation to a minimum and construction activities restricted to dry months to avoid heavy rainfalls; • Using existing roads and lanes used by land owner. • Stockpiles of materials placed away from drainage lines and formed with sediment control structures placed immediately down slope; • Construction debris and excavated material were cleared up at regular intervals • Excavated material stock piled and used for backfilling of foundations, platforms etc. • Minimization of traffic in construction zones and use of a dedicated parking area, i.e. site compound; • Re-vegetation taken up as necessary after construction, in order to reduce the risk of soil erosion. Specific mitigation measures followed in the operational phase of the project: • Waste oil generated shall be stored separately in containers in a secured location in the maintenance room. The storage location and the containers are properly marked. • The waste / used waste oil from the WTGs to be disposed of to a CPCB/SPCB authorized vendor. • A hazardous waste inventory is maintained as per the provisions of the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008.
Source of data checked by the assessment team	Project Grievance register and Interview with maintenance staff
Value(s) of monitored parameter	The O&M log book records all the parameters as listed: • Hazardous waste generated, disposed, any spillages • Waste oil generated, disposed, any spillages • Leakage of any diesel or waste oil Assessment team verified from Project Grievance register and found there were no. Same is verified through the site visit and interview with the local stakeholder and maintenance staff.
Means of verification:	Project Grievance register and Interview with maintenance staff
Cross check mechanism	Not applicable

Safeguarding Principle	4.3.1: Landscape Modification and Soil
Data/parameter:	Maintenance of Landscape visual impact
Unit	Aesthetics
Description	Detailed ESIA study conducted to understand if any of the location needs to be altered. Locals were consulted wherever a WTG location or access road was in vicinity to a settlement. The WTGs are painted with non-reflect paints and are not glary. Re-vegetation taken up as necessary after construction, in order to reduce the risk of soil erosion.
Source of data checked by the assessment team	Project Grievance register, or interview with local villagers

Value(s) of monitored parameter	No significant visual impact observed and no grievances received. Vegetation has been grown wherever possible in the project's land. Apart from this, the project proponent has planted a number of trees to improve the landscape visual impact. The parameter has a neutral (0) impact as there are no grievances received or registered. The WTGs are spread across the terrain and hence have minimalistic presence. Assessment team verified from Project Grievance register and found there were no. Same is verified through the site visit and interview with the local stakeholder.
Means of verification:	Project Grievance register, or interview with local villagers
Cross check mechanism	Not applicable

Safeguarding Principle	4.3.11 Endangered Species
Data/parameter:	Bird & Bat Deaths
Unit	Bird Carcass Count
Description	- During the siting activity, it was ensured that there are no water bodies beside WTGs. - Water pits are not allowed around the WTGs. - None of the area of WTGs erection or transmission lines are under sensitive or under areas of conservation importance - The transmission lines wherever required has reflectors - Storm water control around within 100m of every WTG
Source of data checked by the assessment team	Bird Strike register and interview with the local stakeholder/villagers
Value(s) of monitored parameter	The O&M team maintains a Bird strike register. As per the record, there are no observed carcasses in vicinity of the WTGs. The dead of birds by other reasons including prey and accidents has been observed however as this is not caused by the project's WTGs and its ancillary; it is not recorded. Assessment team verified from Bird strike register and found there were no carcasses in the vicinity of the WTGs. Same is verified through the site visit and interview with the local stakeholder.
Means of verification:	Bird Strike register and interview with Local stakeholder
Cross check mechanism	Not applicable

Safeguarding Principle	4.3.5: Hazardous Waste
Data/parameter:	Hazardous Waste
Unit	-
Description	The manufacture, trade, release and use of hazardous and non-hazardous chemicals and/or materials.
Source of data checked by the assessment team	Plant records
Value(s) of monitored parameter	0

Means of verification:	The waste is disposed to the waste handlers and the firm is complying with all the local laws for monitoring and disposal.
Cross check mechanism	Not applicable

Relevant SDG outcome has been included in ER sheet and have been found correct.

During the site visit interviews with PP, the verification team confirmed that there is a grievance book^{/15/} at project site. Every stakeholder has access to the grievance register and can lodge grievance any time. Same if any is resolved as per the standard operating procedures of the company. By checking grievance book^{/15/} submitted by PP, it was able to confirm there are some comments received from the local people for the present monitoring period which were resolved by the PP. Staff complaints/grievances were addressed as per the company policies. Local people are happy with the implementation of the project activity as it entrusts employment and improve living standard of local people and villagers.

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

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

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

Sections	Debriefing
Trainings & salaries of the employees	During verification process Mr. Murali Krishnam Raju M , PP representative team was interviewed. It was noted that regular technical & nontechnical trainings were conducted and the salaries are in line with the industry standard.

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

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

Item	Baseline estimate	Project estimate	Net benefit
SDG 7: Affordable and Clean Energy	0 MWh	373,714.01 MWh	373,714.01 MWh
SDG 8: Decent Work and Economic Growth	00 Trainings 00 Employees 00 Income generation	80 Trainings 83 Employees 257.68 Lakh INR Income generation	80 Trainings 83 Employees 257.68 Lakh INR Income generation
SDG 13: Climate Action	356,627 tCO ₂ e	0 tCO ₂ e	356,627 tCO ₂ e

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

The below comparison is for the 1st CP covering MP of 01/01/2021 to 31/12/2021

Item	Values estimated in ex ante calculation of approved PDD	Actual values achieved during this monitoring period
SDG 7: Affordable and Clean Energy	180,478 MWh	191,132.01 MWh
SDG 8: Decent Work and Economic Growth	1 Training 93.8 Lakh INR income generation 89 employment generation	41 Training 125.70 Lakh INR income generation 83 employment generation
SDG 13: Climate Action	176,331 tCO ₂	186,735 tCO ₂

The below comparison is for the 2nd CP covering MP of 01/01/2022 to 31/12/2022

Item	Values estimated in ex ante calculation of approved PDD	Actual values achieved during this monitoring period
SDG 7: Affordable and Clean Energy	180,478 MWh	182,582 MWh
SDG 8: Decent Work and Economic Growth	1 Training NA (No estimation provided in PDD or Transition annex) 15 employment generation	39 Training 131.98 Lakh INR income generation 83 employment generation
SDG 13: Climate Action	167,934 tCO ₂	169,892 tCO ₂

3.6 Assessment of Data and Calculation of Greenhouse Gas Emission Reductions

As a result of verification of the ER calculation process, the assessment team confirmed that all the parameters required for the determination of the emission reductions have been included in the Monitoring Report Version 01^{1/} & Final Monitoring report Version 04^{1/} and corresponding ER calculation spread-sheets^{02/} and are consistent with the applied methodology ACM0002, Version 16.0 & 20.0^{4/} and the monitoring plan contained in the registered PDD^{03/}. The parameters are complete in this monitoring period.

After verifying the reported figures with the raw data sources, it's confirmed that the values of the parameters from the raw data sources are consistent with those quoted in the Monitoring Report Version 01 & Final Monitoring report Version 04^{01/} and corresponding ER calculation spread-sheets^{2/}. The verification process for the same has been clearly described in above section of the report. See below for the detailed data:

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

As the monitoring period of the project activity is between two crediting periods, with a start date of 01/01/2021 and an end date of 31/12/2022 therefore to calculate BE_y two emission factors will be included as per the respective crediting period as follows:

For CP 1: 01/01/2015 to 31/12/2021

$EF_{grid,CM,y} = 0.9770$ (Combined margin)

For CP 2: 01/01/2022 to 31/12/2026

$EF_{grid,CM,y} = 0.9305$ (Combined margin)

Therefore,

For the Monitoring Period 01/01/2021 to 31/12/2021 covering the 1st CP (01/01/2015 - 31/12/2021)

$$\begin{aligned} BE_y &= EG_{facility,y} * EF_{grid,CM,y} \\ &= 191,132.01 \times 0.9770 \end{aligned}$$

$$BE_y = 186,735 \text{ tCO}_2 \text{ (Round down)}$$

For the Monitoring Period 01/01/2022 to 31/12/2022 covering the 2nd CP (01/01/2022 - 31/12/2026)

$$\begin{aligned} BE_y &= EG_{facility,y} * EF_{grid,CM,y} \\ &= 182,582 \times 0.9305 \end{aligned}$$

$$BE_y = 169,892 \text{ tCO}_2 \text{ (Round down)}$$

Hence, total GHG emission reduction in this monitoring period from 01/01/2021 to 31/12/2022 (inclusive of both days) is:

$BE_y = \text{Baseline Emission in 2020 from 01/01/2021 to 31/12/2021 (CP 1) + Baseline Emission from 01/01/2022 to 31/12/2022 (CP 2)}$

$$BE_y = (186,735 + 169,892) \text{ tCO}_2$$

$$BE_y = 356,627 \text{ tCO}_2\text{e (Rounded down figure)}$$

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

Item	Baseline value
SDG 7: Affordable and Clean Energy	No Activities in the baseline
SDG 8: Decent Work and Economic Growth	No Activities in the baseline
SDG 13: Climate Action	Emission of 356,627 tCO _{2e}

Project emissions:

The project is a wind power project, no fossil fuel is be consumed according to the methodology ACM0002, Version 16.0 & 20.0 & according to registered PDD VERSION 02 (1st CP) and RCP PDD VERSION 04 (2nd CP), $PE_y = 0 \text{ tCO}_2$

Leakage:

As per ACM0002, Version 16.0 & 20.0, No leakage emission needs to be considered.

Emission reductions:

Thus, the emission reductions are:

$$ER_y = BE_y - PE_y$$

$$= 356,627 - 0$$

$$= \mathbf{356,627 \text{ tCO}_2}$$

The amount of GS-VERs achieved during the monitoring period (01/01/2021 to 31/12/2021) are 5.90 % higher than the estimated value in the GS4GG PDD. The amount of GS-VERs achieved during the monitoring period (01/01/2022 to 31/12/2022) are 1.17 % higher than the estimated value in the GS4GG PDD. This is due to the variability of wind and planned maintenance of the WTGs during the monitoring period which is not in control of Project owner. The estimated PLF as per registered PDD is 20.50 whereas the actual PLF for the current monitoring period (covering both CP1 and CP2) is 21.22 which is 3.53% higher than the estimated PLF. As the percentage variation covered under sensitivity (+10% and -10%). Therefore, IRR is not breaching the benchmark value. Inline with Rule Clarification - TREATMENT OF PROJECTS OVERACHIEVING EMISSION REDUCTIONS, Version 01, VVB confirm that variation is within the range of variation (i.e., +/- 10%) applied for sensitivity analysis. Thus, VVB confirmed that change in variable value is within the expected range of variation & no further assessment is needed.

3.7 Management and Operational System

The responsibilities of data measurement, collection, verifying, archiving etc. have been clearly defined in the registered PDD^{/3/}. The same practice is followed onsite and it is confirmed by the assessment team during the site visit interviews with PP. The data related to ER calculation as well as data monitoring, collection process etc. have been internally reviewed by the management of the Monitoring team regularly. The responsibility of each function is consistent with the monitoring plan in the registered PDD.

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

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

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

4. REFERENCE

LIST OF DOCUMENTS	
S. No.	Document/Evidence/Reference/Web link, Version, Date
1.	Monitoring Report Version 01 dated 19/05/2023, Final Monitoring report Version 05 dated 20/05/2024
2.	ER sheets Version 01 dated 19/05/2023 Final ER Sheets version 04 dated 20/12/2023
3.	Registered PDD Version 02.0 dated 21/12/2015 Registered RCP PDD Version 04.0 dated 31/08/2022 Transition Annex version 2.2 Final GS Validation report for RCP version 03 dated 02/08/2022 Verification Report (1 st Verification), version 05 Dated 13/10/2017 Verification Report (2 nd Verification), version 03 Dated 09/07/2018 Verification Report (3 rd Verification), version 04 Dated 26/05/2020 Verification Report (4 th Verification), version 02 Dated 26/03/2021 Verification Report (5 th Verification), version 03 Dated 20/09/2021 GS Design documents
4.	ACM0002, Version 16.0 & 20.0 "Tool to Calculate the Emission Factor for an Electricity System" (Tool 7) – version 5.0 ⁴ "Tool for the demonstration and assessment of Additionality" (Tool 1) – version 07.0 ⁵ "Tool to calculate the emission factor for an electricity system" (Tool 7) - Version 07.0 ⁶ "Tool for the demonstration and assessment of additionality" (Tool 1) - Version 07.0 ⁷
5.	CDM validation and verification standard for project activities, Version 03.0 GS4GG validation and verification standard version 1.0 GS4GG Activity Requirements: RE Activity Requirements, version 1.4 GHG EMISSIONS REDUCTIONS & SEQUESTRATION PRODUCT REQUIREMENTS, Version 2.3 SAFEGUARDING PRINCIPLES & REQUIREMENTS, VERSION 2.1 SITE VISIT AND REMOTE AUDIT REQUIREMENTS AND PROCEDURES, VERSION 2.0 ASSESSMENT APPROACH FOR REPORTING HIGHER EX-POST EMISSION REDUCTIONS, VERSION 01
6.	GS4GG Requirement: Principle and requirements, version 1.2
7.	Training records of the employees (both skilled/non-skilled) DGR Preparation and report analysis dated 06/02/2021 WTG Performance check & Calibration procedures dated 27/03/2021 Basic information of WTG dated 10/09/2021 Awareness on EHS procedure and system dated 23/04/2022 Behaviour based Safety dated 11/06/2022

⁴ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v5.0.pdf>

⁵ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf>

⁶ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-07-v7.0.pdf>

⁷ <https://cdm.unfccc.int/methodologies/PAmethodologies/tools/am-tool-01-v7.0.0.pdf>

LIST OF DOCUMENTS	
S. No.	Document/Evidence/Reference/Web link, Version, Date
8.	O&M declaration dated 20/09/2023
9.	Monthly reports issued by state utility, MPPKVCL Mandsaur and invoices raised by PP for the complete monitoring period
10.	Calibration certificates of the complete monitoring period ABT meter testing as per load survey (MRI) dated 20/03/2019
11.	Commissioning certificates for power plant are: 1.5 MW X 2 WTGs Commissioning certificates dated 29/04/2015 issued by the MPPTCL, Nagda 1.5 MW X 05 WTGs Commissioning certificates dated 07/11/2014 issued by the MPPTCL, Ratlam 1.5 MW X 02 WTGs Commissioning certificates dated 26/08/2014 issued by the MPPTCL, Ratlam 1.5 MW X 24 WTGs Commissioning certificates dated 20/08/2014 issued by the MPPTCL, Ratlam 1.5 MW X 34 WTGs Commissioning certificates dated 29/04/2015 issued by the MPPTCL, Nagda
12.	Log book records for scheduled maintenance of the power plant for the complete monitoring period
13.	Sample work contract for both skilled and non-skilled manpower
14.	CSR report for the current monitoring period
15.	Grievance register placed at site during the current monitoring period
16.	HSE procedures
17.	Power purchase agreement between Orange Mamatkhedha Wind Private Limited and MPPMCL dated 14/08/2014
18.	O&M Agreement between Orange Mamatkhedha Wind Private Limited and Regen Power Tech private Limited dated 27/12/2013
19.	Technical manual from the Manufacturer
20.	Employment records (Attendance register, Sample Salary Slips)
21.	Meter replacement declaration issued by MPPTCL dated 24/12/2020
22.	No double counting declaration dated 04/08/2023 Revised declaration for No Double Counting of the ERs dated 06/05/2024 including NDC targets

5. **FINAL VERIFICATION STATEMENT**

Applus+ Certification has been engaged by Orange Mamatkhedha Wind Private Limited (Parent Company of Orange Mamatkhedha Wind Private Limited) to perform the 6th verification of the 1st Crediting period and 1st verification of the 2nd crediting period of the “100.5 MW Wind Power Project in Madhya Pradesh, India” (GS Ref. No. GS 3969).

The management of Orange Mamatkhedha Wind Private Limited is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project’s Monitoring Plan in the registered PDD and the applied methodology ACM0002, Version 16.0 & 20.0^{4/}.

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

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

In our opinion, the GHG emission reductions for “100.5 MW Wind Power Project in Madhya Pradesh, India” for the monitoring period 01/01/2021 to 31/12/2022 (Both days included) as reported in Monitoring Report, prepared on the basis of the project’s Monitoring Plan are fairly stated.

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

Reporting period: 01/01/2021 to 31/12/2022 (Both days included)

Verified emissions in the above reporting period:

Project emissions	0 tCO ₂ equivalents
Baseline emissions	356,627 tCO ₂ equivalents
Emission reductions	356,627 tCO ₂ equivalents

Vintage wise breakup of verified emission reduction is given below:

Year		Baseline emission (tCO ₂)	Project Emission (tCO ₂)	Emission Reduction (tCO ₂)
01/01/2021	to	186,735	0	186,735
31/12/2021				
01/01/2022	to	169,892	0	169,892
31/03/2022				
Total		356,627	0	356,627

Date: 29/06/2024

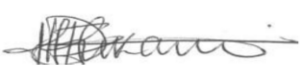
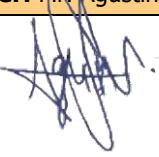
Lead Auditor: Dr. Atul Takarkhede

Tech. Expert: Dr. Atul Takarkhede

Tech. Reviewer: Mr. David Lubanga

Approver (*Applus+ Certification VVB Technical Manager*)

Mr. Agustín Calle de Miguel

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

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

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	01
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	NA
Description of the audit finding		Date:	26/07/2023
To confirm project description and implementation, PO shall submit following documents (relevant to the current monitoring period) to VVB: 1. Commissioning Certificate 2. JMRs, Invoice, and HT bills 3. Grievance register 4. Shutdown and major breakdown details 5. Meter calibration certificate 6. Employment records 7. Training records 8. Power purchase agreement 9. Bird strike register 10. Employees Attendance sheet 11. Sample Salary Slips 12. O&M cost expenses declaration / Annual Operating plan 13. Waste Disposal register 14. Meter Change MoM 15. Copy of Technical specifications of the WTGs 16. No Double counting Declaration 17. O&M HSE logbook			
Project Participant's response		Date:	27/09/2023
All the below mentioned documents are provided with the responses. 1. Commissioning Certificate 2. JMRs, Invoice, and HT bills 3. Grievance register 4. Shutdown and major breakdown details 5. Meter calibration certificate 6. Employment records 7. Training records 8. Power purchase agreement 9. Bird strike register 10. Employees Attendance sheet 11. Sample Salary Slips 12. O&M cost expenses declaration / Annual Operating plan 13. Waste Disposal register 14. Meter Change MoM – meter not changed during monitoring periods mentioned in MR. 15. Copy of Technical specifications of the WTGs 16. No Double counting Declaration 17. O&M HSE logbook			
Documentation provided as evidence by Project Participant			

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	01
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	NA
1. Commissioning Certificate 2. JMRs, Invoice, and HT bills 3. Grievance register 4. Shutdown and major breakdown details 5. Meter calibration certificate 6. Employment records 7. Training records 8. Power purchase agreement 9. Bird strike register⁷⁸ 10. Employees Attendance sheet 11. Sample Salary Slips 12. O&M cost expenses declaration / Annual Operating plan 13. Waste Disposal register 14. Meter Change MoM 15. Copy of Technical specifications of the WTGs 16. No Double counting Declaration 17. O&M HSE logbook			
Auditor's assessment comment		Date:	10/10/2023
VVB team observed that PP has submitted following documents; 1. Commissioning Certificate 2. JMRs & Invoice 3. Grievance register 4. Shutdown and major breakdown details 5. Employment records 6. Training records 7. Power purchase agreement 8. Bird strike register 9. Sample Salary Slips 10. O&M contract 11. Waste Disposal register 12. Copy of Technical specifications of the WTGs 13. No Double counting Declaration 14. O&M HSE logbook Which is found appropriate and relevant to the project activity. Further, meter change certificate, O&M cost expenses declaration, Employees Attendance sheet and Meter calibration certificate for meter serial no. Q0321953 and Q0321954 covering whole crediting period is still missing. Thus, CL#01 is open.			
Project Participant's response		Date:	10/11/2023
All the below mentioned documents are provided with the responses. Meter change certificate, O&M cost expenses declaration, Employees Attendance sheet and Meter calibration certificate for meter serial no. Q0321953 and Q0321954 covering whole monitoring period.			
Documentation provided as evidence by Project Participant			

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	01
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	NA
Meter replacement certificate O&M declaration Employee's attendance sheet Meter calibration certificate			
Auditor's assessment comment		Date:	11/12/2023
VVB observed that PP has submitted the O&M cost expenses declaration dated 20/09/2023 which is found inline with the O&M cost mentioned in the ER sheet. Attendance sheet of the current monitoring period is submitted which is found inline with the ER sheet. It is found that PP has submitted the calibration certificate dated 07/12/2021 for the new energy meters having serial no. Q0321953 and Q0321954 which cover the complete monitoring period of the project and meter replacement certificate dated 24/12/2020 also submitted which is found correct and acceptable to the VVB. Thus, CL#01 is closed.			

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	02
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	NA
Description of the audit finding		Date:	26/07/2023
According to the desk review, VVB observed that design certification renewal of the project activity has been concluded recently and PP has submitted only final PD along with initial report. However, Validation report and final design renewal review document is missing to the VVB. Thus, CL is raised till submission of the requested documents.			
Project Participant's response		Date:	27/09/2023
The Validation report and final design renewal review document are submitted.			
Documentation provided as evidence by Project Participant			
Validation report Final design renewal review document			
Auditor's assessment comment		Date:	10/10/2023
VVB team observed that PP has submitted Validation report and final design renewal review document. Further, VVB team also observed that no FAR has been raised for next verification. Thus, accepted and CL#02 is closed.			

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	03
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	NA
Description of the audit finding		Date:	26/07/2023
Calibration details of installed monitoring meter is mentioned in appendix 1 of the monitoring report. However, calibration period does not cover whole monitoring period. Kindly clarify. Further submit supporting evidence for the same.			
Project Participant's response		Date:	27/09/2023
The calibration frequency mentioned as per Validation Report version 03.0 dated 02/08/2022, is once in three year and accordingly date of previous calibration i.e., 20/03/2019 and also the meters MPC65127 and MPC65126 are replaced by Q0321953 and Q0231954 on 07/12/2021 and the same has been added in the Appendix 1 of the Monitoring Report.			
Documentation provided as evidence by Project Participant			
Validation Report version 03.0 dated 02/08/2022 Calibration certificate dated 20/03/2019 Revised MR version 2.0			
Auditor's assessment comment		Date:	10/10/2023
VVB team observed that PP has submitted calibration certificate dated 20/03/2019 for meter S. No. MPC65127 and MPC65126. However, JMR for whole monitoring period is prepared based on meter S. No. Q0321953 and Q0231954. Therefore, PP shall submit calibration certificate of meter s.no. Q0321953 and Q0321954 covering whole crediting period. Hence, CL#03 is open.			
Project Participant's response		Date:	10/11/2023
The calibration certificates of meter no. Q0321953 and Q0321954 are submitted with responses.			
Documentation provided as evidence by Project Participant			
Calibration certificates			
Auditor's assessment comment		Date:	11/12/2023
During assessment it is found that PP has submitted the calibration certificate dated 07/12/2021 for the new energy meters having serial no. Q0321953 and Q0321954 which cover the complete monitoring period of the project. Thus, CL#03 is closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	01
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	NA
Description of the audit finding		Date:	26/07/2023
1. There is a deviation in the 2nd crediting period. Kindly describe regarding the deviation in the section B.2.3 of the MR. Corrective action sought. 2. Monitoring period mentioned in the Section A.1 of the MR is not in line with the other sections of MR. Corrective action sought.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	01
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	NA
Project Participant's response		Date:	27/09/2023
- The information related to deviation is mentioned in Section B.2.3 of the revised MR and deviation approved by Sustain cert is also provided with supportive document. - That is not monitoring period but the combined period including both monitoring periods same is made in line with ER sheet.			
Documentation provided as evidence by Project Participant			
Deviation form Revised MR version 2.0			
Auditor's assessment comment		Date:	10/10/2023
VVB team observed that PP has submitted revised MR and in the same; - PP has updated section B.2.3 of revised MR and mentioned deviation relation to 2nd crediting period. Further, PP has also submitted deviation form to verify the same. Hence, comment#01 is closed. - PP has made monitoring period consistent throughout the revised monitoring report. Which is found appropriate and relevant to the project activity. Hence, accepted and comment#02 is closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	02
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.2
Description of the audit finding		Date:	26/07/2023
- Project Developer is requested to provide the Single Line Diagram of the project site. - Kindly add the details regarding the substation in the section D.1 and section C of the Monitoring Report. - Kindly update Tool version and number of Tools used throughout the MR. - Some editorial mistakes are observed during the Assessment. PD is requested to update the Font style and format throughout the MR. Thus, corrective action sought.			
Project Participant's response		Date:	27/09/2023
- Single Line Diagram of the project site is provided. - The detail regarding the substation is added in the section D.1 and section C of the revised Monitoring Report. - Tool version and number of Tools used is updated throughout the revised MR. - Font style and format is updated throughout the revised MR.			
Documentation provided as evidence by Project Participant			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	02
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.2
Single Line Diagram Revised MR version 2.0			
Auditor's assessment comment		Date:	10/10/2023
- VVB team observed that PP has submitted Single line diagram. Which is found appropriate and relevant to the project activity. Hence, accepted and comment#01 is closed. - VVB team observed that PP has submitted revised MR and in the same substation details in the section C & D.1. which is found relevant to the project activity. Hence, accepted and comment#02 is closed. - VVB team observed that PP has submitted revised MR wherein Tool version & number of tools has been updated. Hence, accepted and comment#03 is closed. - VVB team observed that PP has submitted revised MR wherein Font style & format has been updated throughout the MR. Hence, accepted and comment#04 is closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	03
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.4
Description of the audit finding		Date:	26/07/2023
Following discrepancies observed during the review of monitoring report in the Section D.1 of the GS- MR dated 19/05/2023, Data and Parameters monitored: - Grid name in the MR is not in line with PDD version 02 for the 1st Crediting period. - Kindly attach the web-link of CEA Database in the GS MR. - Tool Number and version of "Tool to calculate the emission factor for an electricity system" are missing. Kindly update Tool Numbers and versions throughout the MR. - In the Parameter $EF_{CM,Y}$ (For 1st CP), Additional comments regarding this parameter is incorrect as the content is not relevant to this parameter. - Parameter '$EF_{OM,Y}$' (For 2nd CP) and its unit ' tCO₂e/MWh ' notation is not inline the Registered PDD ver 04. Thus, corrective action sought.			
Project Participant's response		Date:	27/09/2023
Following corrections are done in the monitoring report, Section D.1 of the GS- MR dated 19/05/2023 – - Grid name corrected in line with PDD ver 02 for 1st Crediting Period however Indian grid mentioned in bracket. - The web-link of CEA Database version 10 is attached in footnote of the revised MR. - Tool Numbers and versions are updated throughout the revised MR. - Additional comments regarding Combined Margin Emission Factor of NEWNE (now Indian) Grid is corrected in line with the PDD version 2 of the 1st crediting period. - Parameter '$EF_{OM,Y}$' (For 2nd CP) and its unit ' tCO₂e/MWh ' notation is corrected in line with the Registered PDD ver 04.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	03
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.4
Documentation provided as evidence by Project Participant			
Auditor's assessment comment		Date:	10/10/2023
- VVB team observed that PP has submitted revised MR wherein Grid name has been corrected & in line with registered PDD version 02 for 1st Crediting Period. Hence, accepted and comment#01 is closed. - VVB team observed that PP has submitted revised MR wherein Web-link of CEA Database has been inserted in footnote of revised MR. Hence, accepted and comment#02 is closed. - VVB team observed that PP has submitted revised MR wherein Tool version & number of "Tool to calculate the emission factor for an electricity system" has been updated as per registered PDD. Hence, accepted and comment#03 is closed. - VVB team observed that PP has submitted revised MR and in the same under section D.1 Additional comments regarding Combined Margin Emission Factor for 1st crediting period made consistent with registered PDD. Hence, accepted and comment#04 is closed. - VVB team observed that PP has submitted revised MR and in the same parameter 'EF_{OM,y}' (For 2nd CP) and its unit ' tCO₂e/MWh ' notation is corrected in line with the registered PDD v.04. Hence, accepted and comment#05 is closed			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	04
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.4
Description of the audit finding		Date:	26/07/2023
Following discrepancies observed during the review of monitoring report in the Section D.2 of the GS- MR, Data and Parameters monitored: For the parameter SDG 8: - Kindly submit HSE Records & HR Records for the parameter, Training provided to employees & O&M staff. For the parameter SDG 13: - Parameter, Unit and its description of SDG 13: Climate Action are not in line with the Registered PPD ver 04. Corrective action sought.			
Project Participant's response		Date:	27/09/2023
For the parameter SDG 8: HSE & HR Records for the parameter "Quality of Employment" are updated in line with the PDD version 4. For the parameter SDG 13: Parameter, Unit, description and other details of Monitoring Table for SDG 13 "Climate Action" is updated in line with the PDD version 4.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	04
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.4
Documentation provided as evidence by Project Participant			
Training records. Photograph of training session. Attendance list of trainees. Revised MR version 2.0			
Auditor's assessment comment		Date:	10/10/2023
1. VVB team observed that PP has submitted HSE & Training Record which is found appropriate & relevant to the project activity. Hence, accepted and comment#01 is closed. 2. PP has submitted revised MR. VVB team observed that in the same section D.2 has been updated. Parameter, Unit and its description of SDG 13: Climate Action are made consistent with the registered PPD version 04. Hence, accepted and comment#02 is closed.			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	05
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.4
Description of the audit finding		Date:	26/07/2023
During assessment of ER sheet below inconsistencies observed: 1. "Tool to calculate the emission factor for an electricity system, version 05.0", tool version is not in line with the PDD. Also mention the Tool number for same Tool in the Tab 'Emission factor' 2. Bifurcated Export value and Import value of electricity generation is missing in the Tab 'SDG 7 & 13' for the current monitoring period. 3. Unit notation of electricity generation of current monitoring period is incorrect in the entire ER sheet. Thus, corrective action sought.			
Project Participant's response		Date:	27/09/2023
1. "Tool to calculate the emission factor for an electricity system, version 05.0", is in lined as per registered PDD version 2.0 and the same "Tool to calculate the emission factor for an electricity system, version 07.0" is in lined as per registered RCP PDD version 4.0 and tool number for the same has been added in the tab 'Emission factor'. 2. The export value and import value of electricity generation has been bifurcated in the Tab 'SDG 7 & 13' of the revised ER sheet version 2.0. 3. It has been revised.			
Documentation provided as evidence by Project Participant			

Type:	☒ CAR ☐ CL/CR ☐ FAR	Number:	05
Raised by:	Dr. Atul Takarkhede	Ref. to checklist in above tables:	3.4
Revised ER sheet version 2.0			
Auditor's assessment comment		Date:	10/10/2023
1. PP has submitted revised ER sheet and MR. VVB team observed that in the same PP has referred "Tool to calculate the emission factor for an electricity system, version 05.0 & version 07.0". which is inline with registered PDD version 02 (for 1st CP) and PDD version 04 (for 2nd CP). Hence, accepted and comment#01 is closed. 2. PP has submitted revised ER sheet. VVB team observed that in the same PP has provided bifurcation for Export value and Import value of electricity generation. However, some values are not inline with JMR and invoices. Hence, comment#02 is open. 3. PP has submitted revised ER sheet. VVB team observed that in the same PP has corrected the unit notation of electricity generation. Hence, accepted and comment#03 is closed.			
Project Participant's response		Date:	10/11/2023
All the values of export and import are made inline with the JMR and invoices.			
Documentation provided as evidence by Project Participant			
JMR and invoices			
Revised ER sheet version 3.0			
Auditor's assessment comment		Date:	11/12/2023
2. PP has revised export and import values in the revised the ER sheet version 03 which is now inline with submitted JMR and Invoices. Thus, Comment#02 is closed.			

Appendix 2: Calibration details of monitoring meters

Details of Meter Calibration:

Details	Main meter	Check meter
Meter Number	MPC65127	MPC65126
Make	Secure	Secure
Accuracy class	0.2s	0.2s
Location	220kV Pooling Substation	220kV Pooling Substation
Date of calibration	20/03/2019	20/03/2019
Validity	19/03/2022	19/03/2022

Details	Main meter	Check meter
Meter Number	Q0321953 ⁸	Q0231954 ⁹
Make	Apex 100	Apex 100
Accuracy class	0.2s	0.2s
Location	220kV Pooling Substation	220kV Pooling Substation
Date of Previous calibration	22/12/2020	22/12/2020
Date of calibration	07/12/2021	07/12/2021
Validity	06/12/2024	06/12/2024
VVB Assessment	The meters were calibrated as per meter Calibration certificates provided by PD which are as per the norms of NABL and the meters are within the permissible error limit. During assessment it is verified through the meter replacement certificate dated 24/12/2020 that meter serial number MPC65127 and MPC65126 are replaced by Q0321953 and Q0231954 on 22/12/2020. The meters are calibrated once in three years as per the registered Validation Report version 03.0 dated 02/08/2022.	

Appendix 3: Audit Team CVs

Name	SHORT CV. BACKGROUND INFORMATION
Dr. Atul Takarkhede	Dr. Atul Takarkhede is Ph.D. (Environmental Sciences) from Institute of Science, RTM Nagpur University, Nagpur, and he has already published different technical papers related to environmental sciences. He counts with more than 11 years of experience in field of Environmental Auditing, consulting and accreditation. He is an expert in ISO 9001-14001, CO2/GHG Reporting, Carbon Foot Print, Energy, Water and Waste Management reporting for organizations' environmental performance. His professional portfolio is mainly related with carrying out EIA, conducting QA/QC of EIA Reports; conducting environmental/water audits; NABET

⁸ The meters are calibrated once in three years as per the registered Validation Report version 03.0 dated 02/08/2022.

⁹ The meters MPC65127 and MPC65126 were replaced by Q0321953 and Q0231954 on 22/12/2020.

	requirements appliance, functional area expert in Water Pollution & Solid & Hazardous Waste management among others. Furthermore, he counts with solid experience on CDM-VCS-GS consultancy and auditing. Currently he is associated with True Quality Certifications Private Limited and empanelled with Applus+ Certification to carry out GHG audits in the aforementioned schemes.
Mr. Ishan Shrivastava	Mr. Ishan Shrivastava, has done bachelor of engineering in Mechanical Engineering from Rajiv Gandhi Proudhyogiki Vishwavidyalaya, India. He has a year of working experience in India's one of the Maharatna Company i.e. GAIL (India) Limited in the area of Natural Gas, Energy & Environment. Currently, He is working in True Quality Certifications Pvt. Ltd. (An outsource entity for LGAI Technological Center, S.A. (Spain) "Applus+ Certification") since 2019 and has been involved as Auditor (Validator/Verifier) for Validation and Verifications of Project Activities (Renewable and non- renewable projects) under CDM/VCS/GS4GG/GCC programs. Mr. Ishan Shrivastava is based in Indore, India. Mr. Ishan Shrivastava participate as part of the Audit Team as Lead Auditor in Trainee for the assessment.
Mr. Khagesh Sharma	Mr. Khagesh Sharma, has done bachelor of engineering in Electronic and Communication Engineering from Rajiv Gandhi Proudhyogiki Vishwavidyalaya (Bhopal), India. He has 3 years of experience as Engineer, involve in the solar project design & consulting, Operation and maintenance activities. Currently, he is working in True Quality Certifications Pvt. Ltd. (An outsource entity for LGAI Technological Center, S.A. (Spain) "Applus+ Certification") since 2022 and has been involved in supporting Audit teams for Verifications of Project Activities (Renewable and non-Renewable projects) under CDM/VCS/GS4GG programs.
Mr. David Lubanga	Mr. David Lubanga is a trained engineer with over 10 years' 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. 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. Mr. David Lubanga is based in Nairobi, Kenya.

Appendix 4: Training Details

The below data is for 1st CP covering MP from 01/01/2021 to 31/12/2021

Training Date	Topics	Total no. of trainings
16/1/2021	DCN work instruction and importance	1
16/1/2021	Nitrogen protection system	1
30/1/2021	Covid 19 (HSE)	1
30/1/2021	Hydraulic trouble shooting	1
06/02/2021	DGR preparation and report analysis	1
09/02/2021	Duty and responsibility	1
06/03/2021	WEC performance and evaluation	1
06/03/2021	VCB operation	1
06/03/2021	Waste management	1
09/03/2021	HR monthly meeting	1
19/03/2021	Covid 19 awareness (HSE)	1
20/03/2021	Darwing box training	1
20/03/2021	Covid 19 & Health and safety (HSE)	1
27/03/2021	Accountability	1
27/03/2021	WTG performance check and calibration procedure	1
31/03/2021	Culture sensitivity and Diversity	1
10/04/2021	Excel training	1
18/04/2021	Pitch system	1
16/05/2021	Converter system	1
18/05/2021	Culture sensitivity, inclusion & Diversity	1
18/05/2021	Culture sensitivity, inclusion & Diversity	1
18/06/2021	Awareness session of GMAT	1
19/06/2021	Awareness session of defense driving (HSE)	1
19/06/2021	Developing gratitude and empathy of work	1
17/07/2021	Work instruction of IGBT stack replacement	1
19/07/2021	Awareness session on covid 3rd wave (HSE)	1
24/07/2021	VSS C&R Panel	1
28/08/2021	Excel training	1
28/08/2021	SAP training	1
04/09/2021	Wiring Diagram study and awareness	1
10/09/2021	Basic information of WTG	1
11/09/2021	Transformer maintenance	1
11/09/2021	Covid 19 awareness (HSE)	1
30/09/2021	GTMs ticketing system	1
09/10/2021	SOP & PM Activity training	1

04/12/2021	Internal line maintenance and wedge clamp installation	1
04/12/2021	SCADA system & operation	1
04/12/2021	Modification in turbine & its purpose	1
06/12/2021	E maintenance and preparation	1
18/12/2021	Emotional intelligence	1
18/12/2021	PPEs (HSE)	1
Total		41

The below data is for 2nd CP covering MP from 01/01/2022 to 31/12/2022

Date	Topics	Total no. of trainings
26/03/2022	MPU study and block diagram	1
26/03/2022	Implementation of LOTO	1
30/03/2022	Adoptability and change mindset	1
02/04/2022	Study of blade basics	1
05/04/2022	POSH	1
10/04/2022	Converter System Operation	1
23/04/2022	Awareness training on unsafe act & unsafe condition (HSE)	1
23/04/2022	Awareness on EHS procedures and system	1
11/05/2022	EHS	1
14/05/2022	Fire safety	1
14/05/2022	Heat stress	1
11/06/2022	Awareness on permit to work	1
11/06/2022	Behaviour based safety	1
18/06/2022	Pitch system and trouble shooting	1
18/06/2022	LOTO	1
14/07/2022	Awareness on incident management	1
14/07/2022	LOTO	1
23/07/2022	Performance check of WTG	1
30/07/2022	LOTO	1
30/07/2022	Awareness on road accident (HSE)	1
06/08/2022	Hydraulic basic training	1
06/08/2022	Confined space awareness (HSE)	1
19/08/2022	Defensive driving (HSE)	1
20/08/2022	GIMS	1
27/08/2022	Work at height (HSE)	1
03/09/2022	PPE (HSE)	1
10/09/2022	Portable and electrical hand tool machine guarding	1
01/10/2022	H&S Plan	1

26/11/2022	ZH and 4 layer discussion	1
10/12/2022	Material handling	1
10/12/2022	Contract safety management	1
12/12/2022	GWO BST training	1
15/12/2022	GWO manual handling training	1
15/12/2022	GWO firefighting training	1
16/12/2022	Work at height	1
17/12/2022	Work at height and self-rescue practical (HSE)	1
18/12/2022	First aid (HSE)	1
19/12/2022	Manual handling	1
19/12/2022	Fire awareness (HSE)	1
Total		39