



**Verified Carbon
Standard**

RENEWABLE ENERGY PROJECT BY LNB GROUP



Prakoshth Number No. 1-S, Leaf Tower, Second Floor, Plot No. 01, IRIS LEAF Gram Talawali Chanda, Indore
453771 (M.P.) India.

URL: <http://vkucertification.com>

E-mail: info@vkucertification.com

Report ID	VKU.JVV.13.25_VCS_1418
Project Title	Renewable Energy Project by LNB Group
Project ID	VCS 1418
Verification period	31-March-2023 to 30-September-2024 (inclusive of both dates)
Crediting period	31-March-2023 to 30-March-2033 (inclusive of both dates)
Original date of issue	18-03-2025
Most recent date of issue	27-03-2025
Version	03

VCS Standard Version	VCS Standard, v4.7
Client	Infinite Environmental Solutions Limited
Prepared by	VKU Certification Pvt. Ltd.
Approved by	Dr. Vikas Kumar Aharwal (Founder and Director) vikas.aharwal@vkucertification.com
Work carried out by	Vivek Kumar Ahirwar- Team Leader and Technical Expert T.A. 1.2 ¹ Monika Jha - Validator/Verifier Komal Kumari - Validator/Verifier Trainee Akhilesh Joshi – Independent Technical Reviewer cum Technical Expert T.A. 1.2

¹ TL is also acting as a local expert.

Summary:

Description of the project

The project activity involves the installation of Wind and Solar Power Projects. The total installed capacity of the project is 27.20 MW; which involves operation of 18 Wind Turbine Generators (WTGs) with total capacity of 22.20 MW & 1 Solar power plant with total capacity of 5.00 MW located at different states of Rajasthan and Maharashtra in India. The purpose of the project activity is to generate energy electricity by the utilization of wind velocity/solar power and further selling the generated energy to the respective Grid. Over the 10 years of the 2nd crediting period, the project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 29,669 tCO₂e per year, thereon displacing 34,451.41 MWh/year amount of electricity from the generation-mix of power plants connected to the INDIAN Grid, which is mainly dominated by thermal/fossil fuel-based power plant.

Description of Validation & Verification:

1. Purpose and scope of Validation and Verification:

The objective of this Joint Validation & Verification is to have an independent assessment of project activity **"Renewable Energy Project by LNB Group"** (Registry ID: 1418) against all the defined set of criteria under the VCS program requirements in order to confirm that project activity, as documented, sound reasonable and meet the identified criteria.

The validation involves the assessment of project conformance to VCS standards/programs, project conformance to the applied methodology, including the procedure for the demonstration of additionality specified in the methodology, and likelihood that methods and procedures set out in the project description will generate verifiable GHG data and information when implemented. Validation is a requirement and is seen as necessary to provide assurance to stakeholders of the quality of project and its intended generation of VCUs. Validation is part of the VCS project cycle and will finally result in a conclusion by the executing VVB whether a project activity is valid to be submitted for registration to VCS registry. The validation has been conducted for the second crediting period encompassing 31-March-2023 to 30-March-2033 (Inclusive of both start and end dates)

The objective of the verification is to have an independent review ex post determination by a VVB (Validation and Verification Body) of the monitored GHG emission reductions that have occurred as a result of the implementation of the project activity during monitoring period from 31-March-2023 to 30-September-2024 (Inclusive of both start and end dates).

2. Method and criteria used for Validation and Verification:

Validation and Verification is conducted using VKU Certification Pvt. Ltd. procedures in line with the requirements specified in the latest version of the VCS Validation and Verification Manual version 3.2/14/ and applying auditing techniques. The validation/verification team assessed the project activity's compliance against the VCS Standard Version 4.7/13/, the selected CDM methodology and the guidelines of Joint PD&MR. The project is eligible under VCS Scope 1 Energy Industries (renewable/non-renewable sources).

- Performed desk review of project description, monitoring report along with the supporting documents.
- Performed site visits (Onsite) in project locations of India and visited plant sites to verify the installation.
- Conducted interviews with stakeholders and personnel involved in the monitoring

The validation/verification criteria followed the guidance documents provided by VCS included the followings:

- VCS Standard; Version 4.7/13/
- VCS Program Guide; Version 4.4/12/
- VCS Program Definitions; Version 4.5 /15/
- VCS Validation Verification Manual; Version 3.2 /14/
- Applied CDM methodology: ACM0002-Grid-connected electricity generation from renewable sources v 22.0/7/
- Tool 01: Tool for the demonstration and assessment of additionality v 07.0/8/
- Tool 07: Tool to calculate the emission factor for an electricity system v 07.0/9/
- Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period v 3.0.1/10/

3. Findings raised during Validation and Verification

VKU followed the rule-based approach to perform this Joint validation and verification. During course of Joint validation and verification, records related to operation & maintenance, monitoring, and GHG emission reduction calculations of the VCS project activity are verified in relation to all relevant VCS

requirements, and the applied baseline and monitoring methodology. A total of **09** findings were raised, which includes: **06** Corrective Action Request (CARs); **03** Clarification Requests (CLs) and **00** Forward Action Requested (FAR). All the findings raised during the process have been successfully resolved by the assessment team and has been included in the report under [Appendix 3](#).

There were no uncertainties found associated with the Joint validation and verification process.

Summary of the validation and verification conclusions

It is VKU's opinion that the project activity "**Renewable Energy Project by LNB Group**" (VCS ID 1418), meets all relevant requirements for VCS standard version 4.7/13/ and guidelines and correctly applies the baseline and monitoring methodology ACM0002-Grid-connected electricity generation from renewable sources v 22.0/7/. VKU confirms all validation and verification activities including objectives, scope and criteria, level of assurance, project description, monitoring and Joint PD&MR/1/ adhere to VCS Standard Version 4.7/13/ and all associated updated as documented in this report, are complete. The monitoring system is in place and the emission reductions are calculated without material misstatement. Hence, VKU is able to certify that the emission reductions from the project during current monitoring period from 31-March-2023 to 30-September-2024 (inclusive of both the dates) under the second crediting period from 31-March-2023 till 30-March-2033 (inclusive of both the dates) supplied 52,011.36 MWh of electricity that has contributed amounts to 44,788 tCO_{2e}.

CONTENTS

1	INTRODUCTION	8
1.1	Objective	8
1.2	Scope and Criteria	8
1.3	Reasonableness of Assumptions and Level of Assurance	9
1.4	Summary Description of the Project	11
2	VALIDATION AND VERIFICATION PROCESS	12
2.1	Method and Criteria	13
2.2	Document Review	15
2.3	Interviews	19
2.4	Site Visits	21
2.5	Resolution of Findings	23
3	VALIDATION FINDINGS	24
3.1	Project Details	24
3.2	Project Activity Instances in Grouped Projects	44
3.3	Safeguards	45
3.4	Application of Methodology	60
3.5	Non-Permanence Risk Analysis	84
4	VERIFICATION FINDINGS	84
4.1	Project Implementation Status	84
4.2	Accuracy of Reduction and Removal Calculations	87
4.3	Quality of Evidence to Determine Reductions and Removals	88
5	VALIDATION AND VERIFICATION OPINION	94
5.1	Validation and Verification Summary	94
5.2	Validation Conclusion	94
5.3	Verification conclusion	96
5.4	Ex-ante vs Ex-post ERR Comparison	98
	APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION	99
	APPENDIX 2: ABBREVIATIONS	100

APPENDIX 3: AUDIT FINDINGS.....	101
APPENDIX 4: COMPETENCE STATEMENT	113

1 INTRODUCTION

1.1 Objective

LNB Renewable Energy Private Limited has (hereafter referred as PP) commissioned VKU Certification Pvt Ltd. (hereafter referred as VKU) to carry out the Joint validation and Verification of the project activity. The monitoring period of the 1st verification of this project activity “Renewable Energy Project by LNB Group” under the second crediting period from 31-March-2023 to 30-March-2033 (Inclusive of both dates) is from 31-March-2023 to 30-September-2024 (Inclusive of both days). This project activity follows renewable crediting period of 10 years which can be renewed a maximum of two times as outlined in section 1.10 of final VCS Joint PD & MR /1/.

The objective of this joint validation and verification is to have an independent assessment of project activity “**Renewable Energy Project by LNB Group**” (Registry ID: 1418) against all the defined set of criteria under the VCS program requirements. In order to confirm that the project activity, as documented, is sound reasonable and meets the identified criteria. The validation involves the assessment of :

- Project conformance to VCS standard version 4.7/13/
- An independent third-party assessment of the Joint PD & MR, and Emission Reduction sheets to ensure compliance with the applicable VCS requirements
- Project conformance to the applied methodology, including the procedure for the demonstration of additionality specified in the methodology; and likelihood that methods and procedures set out in the project description will generate verifiable GHG data and information when implemented.
- Ensuring adherence to host country legislation, sustainability criteria, and relevant VCS Requirements.

In order to confirm that the GHG emission reductions sound reasonable and meet the identified criteria, the verification involves the assessment of monitoring plan conformance to VCS rules and applied methodology. Verification is a requirement and is seen as necessary to provide assurance on the generation of Verified Carbon Units (VCUs).

1.2 Scope and Criteria

The scope of the Joint validation and verification conducted by VKU Certification Pvt. Ltd. is to perform an independent and objective review of the VCS Joint PD and MR/1/. The VCS Joint PD & MR are assessed against the relevant criteria (as outlined in Section 1.1), including the

approved baseline and monitoring methodology and tools. The validation and verification process follows the guidance provided in the VCS program Guide (Version 4.4)/12/ and VCS Standard (Version 4.7)/13/.

- a) The project and its associated activities
- b) The baseline scenario is correctly defined as per the applied methodology and relate tools,
- c) The GHG sources, sinks and/or reservoirs those apply to the project
- d) The monitoring plan implemented and is transparent and adequate
- e) Physical infrastructure, activities, technologies and processes of the GHG project
- f) All data and information used for ex-ante calculation of emission reductions is of projected and/or hypothetical nature
- g) The project crediting period
- h) The project's first monitoring period

The joint PD & MR /1/ is reviewed against the criteria stated in VCS Standard Version 4.7/13/ and the baseline and monitoring methodology ACM0002: Grid-connected electricity generation from renewable sources Version 22.0/7/. The validation was based on VCS Standard Version 4.7/13/ applying auditing techniques. The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarifications and/or corrective actions may have provided input for improvement of the project design.

The scope of the verification is to verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan;

- a) To confirm that the monitoring system is implemented and fully functional to generate voluntary carbon units (VCUs) without any double-counting
- b) To assess the project's compliance with other relevant rules applicable under Indian legislation
- c) To establish that the data reported are accurate, complete, consistent, transparent and free of material error or omission by checking the monitoring records and the emissions reduction calculation
- d) To evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement;

1.3 Reasonableness of Assumptions and Level of Assurance

VKU is assessing the claims and assumptions made in the joint Project Description & Monitoring Report /1/ i.e., assumptions regarding the determination of baseline scenario, and additionality assessment, as well as validated the assumptions, limitations, and methods used for determining parameters and calculation of baseline emission, project emission and leakage, as per section

04 clause 4.1.2 and 4.1.10 of the VCS Standard version 4.7/13/, applied methodologies. Following the requirements of (VCS), the “reasonableness of assumptions” in this project refers to the validity and credibility of the fundamental principles that are part of the project’s design and implementation. validation process provides a robust assurance regarding the veracity of the reported GHG emission reduction data. It is concluded that this project activity “Renewable Energy Project by LNB Group” (**VCS ID 1418**), meets all relevant requirements for VCS standard version 4.7/13/and guidelines and correctly applies the baseline and monitoring methodology ACM0002: Grid-connected electricity generation from renewable sources v 22.0/7/. The assumptions, limitations, and methods used to calculate the estimated emission reductions or removals are based on the applied methodology hence, they are considered reasonable. The estimated GHG emission reductions for the second crediting period from 31-March-2023 till 30-March-2033 (Inclusive of both dates) are 2,96,691 tCO₂e and the average annual estimated GHG emission reduction from project activity is 29,669 tCO₂e.

The threshold for materiality concerning the aggregate of errors, omissions, and misrepresentations relative to the total reported GHG emission reductions and/or removals shall be 5% for projects and 1% for large projects”, as established for projects by the VCS Standard/13/. The current project falls under the “Project” category hence materiality of **5%** is applicable. In this project scenario, the project validity is confirmed by assessing the project devices and conditions on site during physical visits.

These assumptions included in the project activity are but not limited to, the following aspects:

1. Project Boundary
2. Baseline Scenario
3. Applicability of the methodology
4. GHG Emission Reductions

The reasonableness of these assumptions stated above is critical as they directly influence this project’s effectiveness and its estimated carbon reduction potential. The findings raised during the initial assessment stage after site visit need to be closed and then the thorough assessment of the response will ensure a positive evaluation statement which reasonably assures that the project GHG assertions are materially correct and is a fair representation of the GHG data and information.

All verification activities had been completed with adherence to VKU’s procedure with a “**Reasonable level of assurance**”, as per section 4, clause 4.1.2, 4.1.10 and clause 4.1.24 of the VCS Standard version 4.7/13/. The Joint validation and verification assessment is based on the Joint PD and MR/1/, and the supporting documents (table no. 04) that were made available to the VKU’s assessment team and information collected through performing interviews with PP representatives/local stakeholders during the onsite assessment of the project/38/.

All the versions of the Joint validation and verification report were subjected to an independent technical review to confirm that all validation and verification activities had been completed according to the GHG program requirements and VKU's internal procedure.

The technical review was performed by a technical reviewer(s) qualified by VKU's qualification procedure.

The following individuals are part of Joint Validation & Verification Team as presented in **Table No.- 01** below:

Role/Qualification of Assessment Team	Last Name	First Name
Team Leader cum Technical Expert (T.A .1.2) ²	Ahirwar	Vivek Kumar
Validator/Verifier	Jha	Monika
Validator/Verifier-Trainee	Kumari	Komal
Local Expert	Ahirwar	Vivek Kumar

The following individuals are part of the Technical Review Team as presented in **Table No.- 02** below:

Role/Qualification of Technical Team	Last Name	First Name
Technical Reviewer & Technical Expert (T.A 1.2)	Joshi	Akhilesh

1.4 Summary Description of the Project

The project involves installing Wind and Solar Power Projects with a total capacity of 27.20 MW across Rajasthan and Maharashtra in India. It includes 18 Wind Turbine Generators (22.20 MW) and a Solar Power Plant (5.00 MW). Over 10 years, the project will reduce approximately 29,669 tCO₂e annually by replacing 34,451.41 MWh/year of fossil fuel-based electricity from the Indian Grid. By harnessing wind and solar energy without fossil fuel consumption, the project ensures sustainable power generation with no greenhouse gas emissions or environmental harm.

GHG emission reductions during the second (10) years crediting period is tabulated below: -

² TL is also acting as a Local expert

Project Activity	Annual Average GHG Emission (tCO ₂ e)	Total GHG emission reductions for second crediting period (tCO ₂ e)
Renewable Energy Project by LNB Group	29,669 tCO ₂ e	296,691 tCO ₂ e

The project is promoted by individual sub project investors, the details of which are as follows:

Wind Project Investor	Capacity (MW)	Technology	Regional Grid	State
Manifold Agricrops Pvt. Ltd.	5 x 2.00	Wind	INDIAN Grid	Rajasthan
Parmarth Wind Energy Pvt. Ltd.	12 x 0.85			Maharashtra
Sidhidata Power LLP	1 x 2.00			Maharashtra

Solar Project Investor	Capacity (MW)	Technology	Regional Grid	State
Sidhidata Solar Urja Ltd.	5.00	Solar	INDIAN Grid	Rajasthan

The total emission reduction achieved in this monitoring period i.e., from 31-March-2023 to 30-September-2024 (inclusive of both the dates), the project activity supplied 52,011.36 MWh of electricity that has contributed to 44,788 tCO₂e of GHG reductions.

This project aligns with India's climate goals and sustainable development objectives, fostering the transition to clean energy, reducing environmental impact, and improving the livelihoods of rural communities.

2 VALIDATION AND VERIFICATION PROCESS

2.1 Method and Criteria

Joint Validation & Verification is being conducted using VKU's procedures in line with the requirements specified in the VCS Requirements, i.e., VCS Program Guide Version 4.4/12/, VCS standard document version 4.7/13/.

The aim of validation and verification is to conduct a risk assessment to ascertain the appropriate nature and scope of procedures required to ensure the risk of auditing errors is reduced to a reasonable level. In accordance with ISO 14064-3/43/ the criteria serve as the standard against which evidence is evaluated. The validation and verification process adhered the applied methodology, VCS Standard Version 4.7/13/, and another pertinent VCS requirement.

The solar and wind project is assessed according to the requirements and guidance set by the following documents:

- VCS Program Guide version 4.4 /12/
- VCS Standard version 4.7/13/
- VCS Program Definitions Version 4.5/15/
- VCS validation and verification manual version 3.2 /14/
- Methodology ACM0002: Grid-connected electricity generation from renewable sources version 22.0/7/
- Methodological tools:
 - i. Tool 01: Tool for the demonstration and assessment of additionality version 07.0.0/8/
 - ii. Tool 07: Tool to calculate the emission factor for an electricity system version 07.0/9/
 - iii. Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period version 3.0.1/10/

The key Project information reviewed can be summarized as follow:

- Project proponent, management team, local site team
- Stakeholder consultation process & Public Comment Period

- Project rights and legal requirements
- Project communication
- Risk to local stakeholders
- Additionality assessment
- Methodology used and deviations
- Baseline scenario, project scenario
- Ex-ante Quantification of emission reductions
- Achieved emission reductions
- Monitoring plan, Monitoring procedures, Monitoring Team & Equipment
- Review of operation and measurement records
- Controls established to detect and correct any changes required
- Error of omission in monitoring parameters

Keeping in line with ISO 14064-3; 2019 /43/ & 14065-2020 /44/ (clause 09) Standard guidelines, the assessment team has framed down the process for completing the validation and has followed the same throughout the execution of the audit of the project activity.

The joint validation & verification consisted of the following phases

- **Planning and Intimation to VERRA about site visit:** The assessment team plans the GHG-programme site visit and starts with a desk review of VCS Joint PD&MR/1/, Estimated ER sheet and Actual ER calculation spreadsheet/2/3/, Assessment team has shared a NOVS Form digitally 15 business days before the site visit to VERRA.
- **Strategic Analysis:** The assessment team conducted a strategic analysis to gain insights into the organization's, project's, or product's activities. This analysis was aimed at determining the scope and scale of the joint validation & verification activities and will be utilized in the risk assessment process.
- **Risk Assessment;** The assessment team carried out a risk assessment of the GHG statement to identify the likelihood of a substantial error or noncompliance with the established criteria. The

requirement for a site visit is recognized, and subsequently, the planning for the site visit is undertaken. Decision to take site visit was based on independent risk assessment, as defined in clause 4.1.11 and 4.1.12 subsection 01 of VCS standard version 4.7/13/

- **Evidence-Gathering Activities:** Using a risk-based approach assessment team prepared the evidence-gathering activities to collect sufficient and appropriate evidence upon which to base the conclusion & determine whether the GHG statement conforms to the criteria, taking into account the principles of the standards that apply to the GHG statement.
- **Audit Plan:** An audit plan is prepared, including all sub-elements required for an integrated joint validation & verification process aligned with the contract, scope, objectives, level of assurance, and materiality.
- **Evidence Gathering Plan:** The evidence-gathering plan is formulated in accordance with the risk assessment conducted by VKU Assessment Team. This plan is structured to reduce the verification risk to a level considered acceptable. As a result, the evidence-gathering plan outlines the specific nature and scope of the evidence-collection activities.
- **Client Confirmation and Approval:** The TL approved audit plan was sent to the client for confirmation via email on 27-January-2024.
- **Document Review:** Relevant documents, such as the verification report, monitoring plan, methodology, VCS Joint PD & MR/1/, ER sheet and QA/QC procedure, are thoroughly reviewed.
- **On-Site Assessment:** This includes interviews and evaluation of the actual project scenario through onsite visit and this is line with the VCS standard version 4.7/13/
- **Resolution of Discrepancies:** Any non-conformities identified during the assessment are addressed and resolved and is documented in Appendix-3 of this report.
- **Independent Review:** A technical reviewer will provide an independent assessment of the project.
- **Final QC and Opinion:** After technical review completeness check is conducted, opinion is issued in the final Joint validation and verification report.

The Joint validation and Verification schedule followed for the project activity is as provided in **Table No.03:**

Milestone Description	Time
Date of contract signing with VVB	10/01/2025
Submission of Validation documents to VVB	15/01/2025
Document Review	16/01/2025 and 17/01/2025
Onsite Audit	05/02/2025 (Day 1) 06/02/2025 (Day 2) 10/02/2025 (Day 3)
Audit findings Sent on	18/02/2025

TR Round Completion	26/03/2025
---------------------	------------

2.2 Document Review

The VCS Joint PD & MR /1/ and supporting background documents related to the project implementation are being reviewed. Document review was conducted to ensure consistency and identify any deviation from VCS program requirements. Desk review included an examination of the project design details, baseline scenario, ex-ante and monitoring data and parameters, and ex-ante quantification of GHG emission reductions. Furthermore, the VCS Joint PD & MR /1/ and emission reduction calculation spreadsheets/02/ for ex-ante estimation and for current monitoring period from 31-March-2023 to 30-September-2024 (inclusive of both the dates), relevant decisions, clarifications and guidance of VCS, other information and references relevant to the project activity are also been assessed. During the desk review, VKU has applied standard auditing techniques to assess the quality of information provided, including a review of the data and information presented to verify their completeness; a review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures; and an evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

As per clause 3.26 and clause 3.26.3 of the VCS Standard version 4.7/13/. It is an obligation for the project proponent to make available to the assessment team the required supporting documents and data needed to support statements and data as documented in the VCS Joint PD & MR. Thus, the assessment team reviewed the following documents during this Joint validation & verification process.

Table 04- Lists of the documentation that was reviewed during this validation & verification:-

S.No.	Current Validation and Verification Reference Documents
/1/	VCS Joint PD & MR titled “Renewable Energy Project by LNB Group” prepared by Infinite Environmental Solutions Limited - Version 01 dated 15-January- 2025 - Version 03 dated 18-March-2025 - Version 04 dated 26-March-2025
/2/	Estimated ER Sheet titled “Renewable Energy Project by LNB Group” prepared by Infinite Environmental Solutions Limited Version 01 dated 15-January- 2025

	Version 03 dated 18-March-2025
/3/	Actual ER Sheet titled “Renewable Energy Project by LNB Group” prepared by Infinite Environmental Solutions Limited - Version 01 dated 15-January- 2025 - Version 03 dated 18-March-2025
Background Documents	
/4/	Registered VCS PD titled “Renewable Energy Project by LNB Group” prepared by EKI Energy Services Limited Version 3.0 dated 24-March-2015
/5/	Validation report titled “Renewable Energy Project by LNB Group” Previous Verification Reports available on project webpage
/6/	<u>VCS Joint Project Description & Joint PD&MR Template; Version 4.4</u>
/7/	CDM Methodology: <u>ACM0002: Grid-connected electricity generation from renewable sources --- Version 22.0</u>
/8/	Tool 01: Tool for the demonstration and assessment of additionality version 07.0
/9/	Tool 07: Tool to calculate the emission factor for an electricity system version 07.0
/10/	Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period version 3.0.1
/11/	<u>CO₂ Baseline Database for the Indian Power Sector User guide version 20.0 December 2024</u>
/12/	<u>VCS Program Guide; Version 4.4 dated 29-August-2023</u>
/13/	<u>VCS Standard; Version 4.7 dated 16-April-2024</u>
/14/	<u>VCS Validation and Verification Manual; Version 3.2 dated 19-October-2016</u>
/15/	<u>VCS Program Definitions; Version 4.4 dated 29-August-2023</u>
/16/	UNFCCC Project search: https://cdm.unfccc.int/Projects/projsearch.html
/17/	Gold Standard: Foundation: https://registry.goldstandard.org/projects?q=&page=1
/18/	Project Webpage: https://registry.terra.org/app/projectDetail/VCS/1418
/19/	<u>Renewable Energy Certificate Registry of INDIA - Registered RE Generator List (recregistryindia.nic.in)</u>

Supporting Documents Submitted by PP to VVB	
/20/	JMR/Credit notes & Invoices
/21/	Bird strike register
/22/	Breakdown details and generation records
/23/	Calibration Certificate
/24/	Commissioning certificate
/25/	Employee details
/26/	Single Line Diagram
/27/	Grievance Reister
/28/	Company discrimination policy
/29/	No double accounting declaration
/30/	O & M Agreement and ownership document
/31/	PLF Calculation
/32/	Training Records
/33/	PPA
/34/	Technical Specification
/35/	Renewable Energy share VCS_1418
VVB Documents used during Current Validation and Verification	
/36/	GPS map camera used for location during onsite visit and Google earth for desk review of the “Renewable Energy Project by LNB Group”
/37/	Notice of Validation/Verification Services (NOVS) Form: VCS 1418
/38/	Focused Group Discussion conducted during onsite visit by assessment team on 05-February-2025, 06-February-2025 and 10-February-2025
/39/	Site visit Photographs
/40/	Attendance sheet of onsite audit__VKU.JVV.13.25_VCS_1418
/41/	Audit Plan _VKU.JVV.13.25_VCS_1418
/42/	Grievance register present on site and its photograph for desk review

/43/	<u>ISO 14064-3:2019: Greenhouse gases – Part 3: Specification with guidance for the verification and validation of greenhouse gas statements</u>
/44/	<u>ISO 14065:2020: General principles and requirements for bodies validating and verifying environmental information</u>
/45/	<u>ISO/IEC 17029:2019: Conformity assessment – General principles and requirements for validation and verification bodies</u>

2.3 Interviews

VKU Assessment Team has performed an onsite audit on **05-February-2025, 06-February-2025 and 10-February-2025** in onsite mode. The Table No.-05, Table No.-06 and Table No.- 07 below describe the onsite interview process/38/ and further identifies personnel, including their roles, who were interviewed and/or where personnel responsible for monitoring of the project activity, data collection and management, and QA/QC procedure were interviewed.

The objective of the interview process was to solicit important information from personnel related to project and relevant to the validation and verification process. Onsite interviews and information discussions were conducted with representatives from project implementer, Operation Staffs of the composting systems in all three locations.

The details of the people interviewed during monitoring period are mentioned in the table below as per the **VKU.F46W. Attendance sheet On-site Audit** signed by PP and other representatives/38/

Table No: 05: Details of Personnel Interviewed during site visit³

S. No.	Date	Name and Role	Organization	Topic
1	05/02/2025	Kapil Kumar Joshi (LNB Manager)	LNB Renewable Energy Limited	- Detailed project scenario - Project design, Baseline scenario, Baseline emission and implementation
2		Sunil Vishnoi (Site incharge)	Sidhidata Solar Urja Ltd.	
4		Ramesh Paliwal (Engineer)	Sidhidata Solar Urja Ltd.	

³ No female employee found during onsite assessment as they don't prefer to work due to remote locations of the site.

5	06/02/2025	Tulchharam (Site Incharge)	Manifold Agricrops Pvt. Ltd	- Project boundary - Technical description of the project, additionality and monitoring along with QA/QC - Data recording, management, and archiving procedure - ER calculation, Breakdown details and maintenance of generation records - Trainings conducted
6		Saurav (Site Incharge)	INOX Green Energy Services Ltd.	
7		Jay Jay Ram (O&M Team)	INOX Green Energy Services Ltd.	
8	10/02/2025	Surya Prasad Behera (Engineer)	Ever Renew Energy Pvt. Ltd	
9		A. Kasirel (Senior Eng. O&m team)	Ever Renew Energy Pvt. Ltd	
10		M. G. Ganesh (senior Engineer)	Ever Renew Energy Pvt. Ltd	

During the onsite audit, the Assessment Team interviewed the local stakeholders involved in the projects to verify the implementation of the execution and implementation of project activity along with other procedures as listed in “topic of discussion” in the table below:

Table No 06: Details of Local Stakeholders Interviewed

S.No.	Date	Name & Gender	Topic of Discussion
1	05/02/2025	Abhay Singh (Male)	- Stakeholder Consultation details- Place, date, and time of meeting, process followed for identification - Invitation method employed - Grievance registration process and redressal methods - Execution of Project activity and its impact on the economic, social and environmental parameters on the local people of the area & around the situated project activity - The ongoing communication procedure and the address of their grievance mechanism followed by the project proponent
2		Vikash (Male)	
3		Yarr Mohamad (Male)	
4	06/02/2025	Salman Khan (Male)	
5		Prakash Chandra (Male)	
6	10/02/2025	Shrikant Salunkhe (Male)	
7		Vaibhav (Male)	

			• Scope and generation of employment in the locality due to the implementation of said project activity in the area.
--	--	--	--

2.4 Site Visits

The onsite inspection of this Joint validation and verification was conducted on 05-February-2025, 06-February-2025 and 10-February-2025. A ground inspection of the project was conducted during the site visit as listed in section 2.3. The validation and verification plan “VKU.F24W. Audit Plan” was sent for prior intimation to the client of our VKU’s auditing process. Specifically, the audit plan utilized the VCS guidance documents as per the requirements of the ISO 14064-3: 2019/43/ and ISO 14065: 2020/44/. Any modifications applied to the audit and sampling plan were communicated to PP and ensured that the relevant PP personnel are notified prior to the beginning of site visit.

During the site inspection, the project site was inspected and documents evidence were checked, details as following table no. 07:-

S No.	Activity performed on-site	Site location	Date	Team members
	• Opening meeting • Interview with PP, local officers, local residents • On-site inspection • Interview with Operation Staffs of the site, • Documents review and cross checks between the information	Bhadla, Phalodi, Jodhpur, Rajasthan Malusar, Dangri Area, Jaisalmer, Rajasthan Kolhapur, Maharashtra	05-02-2025 06-02-2025 10-02-2025	• Vivek Kumar Ahirwar (Team Leader) • Komal Kumari (Validator/Verifier Trainee)

	provided in the Joint PD and MR. - Finding Summary - Close Meeting			
--	--	--	--	--

Decision to take site visit was based on independent risk assessment, as defined in section 4.1.13 of VCS standard version 4.7/13/. An On-site visit was undertaken by the verification team to the project site mentioned in the above table to carry out the following:

- An assessment of the implementation of the registered project activity in accordance with the registered VCS PD /4/.
- A review of information flows that have been used to generate, aggregating and reporting of the monitoring parameters.
- Interviews/38/ with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in registered VCS PD /4/.
- A cross check between information provided in the monitoring report and data from other sources such as plant logbooks, inventories, generation record, purchase records or similar data source.
- A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the VCS PD/4/, the applied methodology including applicable tool(s), and, where applicable, the applied standardized baseline.
- A review of calculations and assumptions made in determining the GHG data and emission reductions.
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

Cross-checks between information provided by interviewees to ensure that no such relevant information is omitted during the site visit. A project-specific audit plan was developed to guide the validation auditing process to ensure efficiency and effectiveness. The purpose of the audit plan was to present a risk assessment for determining the nature and extent of the Joint validation and verification process and procedures necessary to ensure the risk of auditing error was reduced to a reasonable level.

Based upon the conditions observed for monitoring to detect the processes with the highest risk of material discrepancy. The Joint validation and verification activities in which risks were assessed were the evaluation of the applicability, baseline scenario, additionality, monitoring system, stakeholders' identification, grievance mechanism, etc.

2.5 Resolution of Findings

The objective of this phase of the joint validation & verification is to resolve any outstanding issues that need to be clarified for VKU's positive conclusion on the project description and monitoring report. To guarantee transparency validation and verification protocol has been customized for the project. The protocol shows transparently the requirements, means of validation/ verification, and the results from validating and verifying the identified criteria. The different non-conformity types are listed below:

A corrective action request (CAR) is raised if one of the following occurs:

- Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;
- Mistakes have been made in applying assumptions, data or calculations of emissions reductions that will impair the estimate of emission reductions or applicable methodological specific requirements have not been met
- Issues identified in a FAR during validation and previous verification to be verified during verification have not been resolved by the project proponents.

A clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met.

A forward action request (FAR) is also raised in cases where any required deviation/information is not fulfilled in current verification and thus needs to be taken up in consequent verification for better transparency thus holding the applicability of the methodology eligible to the project activity and there is no impact of the same on additionality, baseline scenario & emission reduction calculation of project.

In the context of FARs, risks have been identified, which may endanger the delivery of high-quality GHG reductions in the future, i.e., by deviations from standard procedures as defined by the MP. Therefore, such aspects should receive a special focus during the consecutive verification. A FAR may originate from lack of data sustaining claimed GHG reductions.

In summary, **03 CLs, 06 CARs and 00 FARs** have been raised during this Joint validation & Verification till date. All the findings are closed and details are given under Appendix 3 of this report.

2.5.1 Forward Action Requests

This is the first verification of the project activity under second crediting period and there is no any FAR raised during this joint validation and verification.

3 VALIDATION FINDINGS

3.1 Project Details

The project is registered under VCS titled **“Renewable Energy Project by LNB Group”** with reference number 1418 is a solar and wind project as per VCS Joint PD and MR submitted by Infinite Environmental Solutions Limited which is not part of a grouped or bundled project activity. The project falls under Sectoral scope: 01 Energy Industries (renewable/non-renewable sources).

The purpose of the project activity is to generate energy electricity by the utilization of wind velocity/solar power and further selling the generated energy to the respective Grid. In this process there is no consumption of any fossil fuel and hence it does not lead to any greenhouse gas emissions. Thus, electricity would be generated through sustainable means without causing any negative impact on the environment. The project activity involves the installation of Wind and Solar Power Projects. The total installed capacity of the project is 27.20 MW; which involves operation of 18 Wind Turbine Generators (WTGs) with total capacity of 22.20 MW & 1 Solar power plant with total capacity of 5.00 MW located at different states of Rajasthan and Maharashtra in India. Moreover, to verify the same project proponent has submitted the commissioning certificate, and power purchase agreement, which is found consistent by the assessment team. Over the 10 years of the 2nd crediting period, the project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 29,669 tCO₂e per year, thereon displacing 34,451.41 MWh/year amount of electricity.

Estimated Annual Reductions-

The average annual GHG emission reduction from the project activity is 29,669 tCO₂e, and the total emission reductions in the crediting period is 2,96,691 tCO₂e.

Item	Evidence gathering activities, evidence checked, and assessment conclusion			
Audit history	The audit history of the project activity is as follows:			
	Audit type and period	Program	Validation/Verification body name	Number of years
	Validation (31-March-2013 to	VCS	EPIC Sustainability	10 years

	30-March-2023 Inclusive of both days)		Services Private Limited	
	Verification (31-March-2013 to 31-May-2015 Inclusive of both days)	VCS	EPIC Sustainability Services Private Limited	02 Years, 02 Months, 00 Days
	Verification (01-June-2015 to 30-November-2017 Inclusive of both days)	VCS	Applus Certification	02 Years, 05 Months, 29 Days
	Verification (01-December-2017 to 29-February-2020 Inclusive of both days)	VCS	Applus Certification	02 Years, 02 Months, 28 Days
	Verification (01-March-2020 to 31-December-2021 (Inclusive of both days)	VCS	Applus Certification	01 Years, 09 Months, 30 Days
	Verification (01-January-2022 to 30-March-2023 Inclusive of both days)	VCS	RINA Services S.p.A.	01 Year, 02 Months, 30 Days
	Validation (Renewal) (31-March-2023 to 30-March-2033 inclusive of both the dates)	VCS	VKU Certification Private Limited	10 Years
	Verification (31-March-2023 to 30-September-2024 Inclusive of both days)	VCS	VKU Certification Private Limited	01 Year, 06 Months, 01 day

	Total: Crediting Period 01: 31-March-2013 to 30-March-2023 (inclusive of both the dates) Crediting Period 02: 31-March-2023 to 30-March-2033 (inclusive of both the dates) CP 02 Verification 01: 31-March-2023 to 30-September-2024 (Inclusive of both days)			Crediting Period 01 and 02: 20 Years CP 02 Verification 01: 01 Year, 06 Months, 01 day
	Evidence gathering activities: Assessment team has visited the VERRA webpage to confirm this project and previous verifications with the available documents on the site. Also, assessment team has reviewed the contract signed by the PP with the VKU Certification Pvt. Ltd. to confirm the current monitoring period for the verification of this project activity. Evidence Checked: Assessment team has cross-checked VERRA webpage and contract signed by the PP with the VKU Certification Pvt. Ltd. Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment team it is concluded that it is the joint validation and verification of this project activity 'Renewable Energy Project by LNB Group' (VCS 1418). The monitoring period for this verification activity is from 31-March-2023 to 30-September-2024 (Inclusive of both dates).			
Sectoral scope	The project falls under the sectoral scopes:			

	Sectoral scope: 01 – Energy industries (renewable/non-renewable sources) Evidence gathering activities: During desk review assessment team has reviewed the Joint PD&MR /1/, VERRA webpage and visited the site to confirm the sectoral scopes applicable to this project activity ‘Renewable Energy Project by LNB Group’ Evidence Checked: Assessment team has cross-checked VERRA webpage and contract signed by the PP with the VKU Certification Pvt. Ltd., visited the site and interviewed project representatives to understand and confirm the sectoral scopes applicable to this project activity. Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment team it is concluded that this project activity ‘Renewable Energy Project by LNB Group’(VCS 1418) falls under the following sectoral scopes: 01 – Energy industries (renewable/non-renewable sources) Project activity type: I - Renewable Energy Projects
AFOLU project category, if applicable	Not Applicable, as the project is solar and wind power project and it does not come under AFOLU project category.
Project activity type	The project is not a grouped project falls under Project activity type: I - Renewable Energy Projects. Evidence gathering activities: During desk review assessment team has reviewed the project design mentioned in section 1.5 of Joint PD&MR/01/, visited the site and interviewed the project representatives to confirm the nature of project activity ‘Renewable Energy Project by LNB Group’ Evidence Checked: Onsite visit/38/ Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment team it is concluded that this project activity is a renewable energy project.
General eligibility of the project to participate in the VCS Program	As per section 2.1.1 of the scope of the VCS program, VCS standard; Version 4.7/13/ the scope of the VCS program is as follows:

1. The seven Kyoto Protocol greenhouse gases.
2. Ozone-depleting substances.
3. Project activities supported by a methodology approved under the VCS Program through the methodology approval process.
4. Project activities supported by a methodology approved under an approved GHG program unless explicitly excluded (see the Verra website for exclusions).
5. Jurisdictional REDD+ programs and nested REDD+ projects as set out in the VCS Program document Jurisdictional and Nested REDD+ (JNR) Requirements.

Evidence gathering activities: During desk review assessment team has reviewed Section 1.1: Summary Description of Project, Section 1.12: Description of Project Activity, Section 1.4: Project Eligibility, Section 1.5: Project Design, Section 4.1: Implementation of the Project Activity mentioned in the Joint PD&MR/1/, Visited the site and interviewed project representatives.

Evidence Checked: Assessment team has cross-checked the information mentioned in the Joint PD&MR/1/ during the site visit through physical inspection of project site implemented in this project activity with the applied methodologies and interview of project representatives during site visit.

Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment team it is concluded that:

1. The project activity reduces GHG emission (CO₂) which belong to the seven Kyoto Protocol greenhouse gases; thus, this project activity complies with point 1 of section 2.1 of the scope of the VCS program, VCS standard; Version 4.7/13/
2. The VCS Program also excludes the following project activities under the circumstances indicated in Table 1 of section 2.1.3 of VCS Standard Version 4.7, /13/ via checking

	all the excluded project activities in the table, it is verified that this project type is not excluded by the scope of VCS program. 3. The applied CDM methodology ACM0002: Grid-connected electricity generation from renewable sources/7/ is approved under the CDM Executive Board's approved list of consolidated large-scale project methodologies, which by default also a qualified methodology under the Voluntary Carbon Standard (VCS), thus this project activity is supported by a methodology approved under a VCS and approved GHG program, hence, complies with point 3 of section 2.1 of the scope of the VCS program/12/, VCS standard; Version 4.7/13/. Hence, this project activity 'Renewable Energy Project by LNB Group' is eligible to participate in the VCS Program.
AFOLU project eligibility, if applicable	The Project is a NON-AFOLU project, hence this section is not applicable
Transfer project eligibility, if applicable	This project is not registered in any other GHG program and it is listed only in VERRA. Hence, not applicable as the project is not being transferred.
Project design	The project has multiple locations but it is not a grouped project. Applicability Conditions: Geographical Area: The project activity is located in the geographical boundary, i.e., India, and owned by the project proponent. Baseline scenario: All Project Activity Instances shall meet the baseline definition as defined in respective methodology and as explained in section 3.4. Technology type: The technology used in this project activity is solar and wind which is an environment friendly technology since there are no GHG emissions associated with the electricity generation. Evidence gathering activities: During desk review assessment team has reviewed the Joint PD&MR/1/, conducted site visit and interviewed PP representatives. Evidence Checked: Assessment team has cross-checked the project design mentioned in the Joint PD&MR/1/ through the

	physical inspection of the project activity and interview of project representatives. Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment team it is concluded that the project design mentioned in the Joint PD&MR/1/ is correct as per para 3.6.16 and 3.6.17 of VCS Standard Version 4.7/13/
Project ownership	The Project is owned by LNB Renewable Energy Private Limited, which is the project participant of the Project and Infinite Environmental Solutions Limited is the bundling agency. The individual PPs are the sole owner of project activity as per the commissioning certificate. Evidence gathering activities: During desk review assessment team has reviewed the Joint PD&MR/1/; conducted site visit and interviewed PP representatives. Evidence Checked: Assessment team has cross-checked the project ownership mentioned in the Joint PD&MR/1/ through the physical inspection and project ownership documents // of the project activity and interview of project representatives. Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment team it is concluded that there is an ambiguity over the project ownership and carbon credit rights of this project activity/30/.
Project start date	The project start date is 31-March-2013 which is verified as the date of the earliest commissioning date through commissioning certificates/24/. The project activity is a non-AFOLU project, and the start date is the earliest commissioning date amongst all the individual projects which are part of this project activity which is 31-March-2013. Evidence gathering activities: During desk review assessment team has reviewed the Joint PD&MR and the supporting documents submitted by PP, conducted site visit and interviewed PP representatives. Evidence Checked: Assessment team has cross-checked the project start date mentioned in the Joint PD&MR/1/ with the help of commissioning certificate and during the site visit of the project activity through interview of project representatives.

	Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment team it is concluded that the project start date of this project activity is 31-March-2013 and it is correct and consistent with the VCS Standard; Version 4.7/13/.
Project crediting period	The project activity adopts renewable crediting period of 10 years' period which can be renewed for maximum 2 times. Crediting period of this project activity are: Crediting Period 01: 31-March-2013 to 30-March-2023 (inclusive of both the dates) Crediting Period 02: 31-March-2023 to 30-March-2033 (inclusive of both the dates) Evidence gathering activities: During desk review assessment team has reviewed the Joint PD&MR/1/, conducted site visit and interviewed PP representatives. Evidence Checked: Assessment team has cross-checked the crediting period mentioned in the Joint PD&MR/1/ with the registered documents available on the project webpage (previous verifications). Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment team it is concluded that the start date of the renewable crediting period is 31-March-2013. As per VCS standard; Version 4.7 it is correct and the crediting period is from 31-March-2023 to 30-March-2033 (Inclusive of both dates).
Project scale	The estimated average annual emission reductions for this project activity are less than 300,000 tCO₂, Hence, the project falls under "Project" as per VCS Standard; Version 4.7/1/. Evidence gathering activities: During desk review assessment team has reviewed the Joint PD&MR/1/, ER Sheet prepared by Infinite Environmental Solutions Limited /2/3/ Evidence Checked: Assessment team has cross-checked the estimated average annual emission reductions mentioned in section 1.11 of the Joint PD&MR/1/ with the help of ER Sheet prepared by Infinite Environmental Solutions Limited /2/3/ and the methodologies ACM0002: Grid-connected electricity

	generation from renewable sources; Version 22.0/7/ applied in this project activity. Assessment Conclusion: On the basis of the evidence-gathering activities and the evidences cross-checked by the assessment team it is concluded that the estimated average annual emission reductions of this project activity are in line with the applied methodologies ACM0002: Grid-connected electricity generation from renewable sources; Version 22.0/7/ applied in this project activity. Since the estimated average annual emission reductions of this project activity is 29,669 tCO₂e which is less than 300,000 tCO₂e per year. The scale of this project activity is 'Projects' as per para 3.10.1 of VCS Standard Version 4.7/13/. Further, the estimated emission reductions may change and it depends upon the final assessment and technical review of this project activity by the VKU certification Pvt. Ltd. Hence, the scale may be change depending upon the change in estimated emission reduction.														
Likelihood of achieving estimated GHG emission reduction or removals	Estimated average annual emission reductions of this project activity is mentioned below. <table border="1"> <thead> <tr> <th>Calendar year of crediting period</th><th>Estimated GHG emission reductions or removals (tCO₂e)</th></tr> </thead> <tbody> <tr> <td>31-March-2023 to 31-December-2023⁴</td><td>22,445</td></tr> <tr> <td>01-January-2024 to 31-December-2024</td><td>29,871</td></tr> <tr> <td>01-January-2025 to 31-December-2025</td><td>29,816</td></tr> <tr> <td>01-January-2026 to 31-December-2026</td><td>29,762</td></tr> <tr> <td>01-January-2027 to 31-December-2027</td><td>29,708</td></tr> <tr> <td>01-January-2028 to 31-December-2028</td><td>29,654</td></tr> </tbody> </table>	Calendar year of crediting period	Estimated GHG emission reductions or removals (tCO ₂ e)	31-March-2023 to 31-December-2023 ⁴	22,445	01-January-2024 to 31-December-2024	29,871	01-January-2025 to 31-December-2025	29,816	01-January-2026 to 31-December-2026	29,762	01-January-2027 to 31-December-2027	29,708	01-January-2028 to 31-December-2028	29,654
Calendar year of crediting period	Estimated GHG emission reductions or removals (tCO ₂ e)														
31-March-2023 to 31-December-2023 ⁴	22,445														
01-January-2024 to 31-December-2024	29,871														
01-January-2025 to 31-December-2025	29,816														
01-January-2026 to 31-December-2026	29,762														
01-January-2027 to 31-December-2027	29,708														
01-January-2028 to 31-December-2028	29,654														

⁴ All the dates are inclusive of both dates

	01-January-2029 to 31-December-2029	29,601
	01-January-2030 to 31-December-2030	29,548
	01-January-2031 to 31-December-2031	29,495
	01-January-2032 to 31-December-2032	29,443
	01-January-2033 to 30-March-2033	7,348
	Total estimated ERRs during the first or fixed crediting period	2,96,691
	Total number of years	10 years
	Average annual ERRs	29,669
Technologies and measures implemented by the project activity	Evidence gathering activities: Desk Review of previous verifications and Estimated ER Sheet prepared by Infinite Environmental Solutions Limited Evidence Checked: Assessment team has cross-checked the estimated average annual emission reductions of this project activity mentioned in section 1.11 of the Joint PD&MR/1/ with Estimated ER Sheet prepared by Infinite Environmental Solutions Limited/2/. Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment team it is concluded that the estimated average annual emission reductions of this project activity are reasonable and achievable by this project activity.	
	Evidence gathering activities: During desk review assessment team has reviewed the Joint PD&MR, conducted site visit and interviewed PP representatives/38/. Evidence Checked: Assessment team has cross-checked the section 1.12: Description of the project activity and section 4.1: Implementation status of the project activity mentioned in the	

	Joint PD&MR with the details of this project. The technologies and measures implemented in the project activity are verified during the site visit through the physical inspection of the project site and interview of project representatives. Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment team it is concluded that this project is implemented both solar and wind technology found during onsite inspection of the site.																
Implementation schedule of the project activity or activities	Evidence gathering activities: During desk review assessment team has reviewed the Joint PD&MR, conducted site visit and interviewed PP representatives. Evidence Checked: Desk review of supporting documents and onsite visit/38/. Assessment Conclusion: Assessment team confirms that the project activity has been commissioned on the 31-March-2013, same has been verified through the commissioning certificate/24/ by the VVB.																
Project location	The project activity is located in different locations in State Maharashtra and Rajasthan in India. The location of the project has been provided in section 1.13 of the joint PD& MR/1/. <table><tr><th>Investor</th><th>Capa city (MW)</th><th>Machi ne ID</th><th>Location</th><th>Latitude/Lon gitude</th></tr><tr><td rowspan="3">Manifold Agricrops Pvt.Ltd.</td><td>2.00</td><td>DAN-T-12</td><td rowspan="3">Malusar, Dangri Area, Jaisalmer, Rajasthan</td><td>Latitude:26° 33’38.2” Longitude: 71° 21’1.5”</td></tr><tr><td>2.00</td><td>DAN-T-59</td><td>Latitude: 26° 31’23.4” Longitude: 71° 25’55”</td></tr><tr><td>2.00</td><td>DAN-T-60</td><td>Latitude: 26° 31’6.8”</td></tr></table>	Investor	Capa city (MW)	Machi ne ID	Location	Latitude/Lon gitude	Manifold Agricrops Pvt.Ltd.	2.00	DAN-T-12	Malusar, Dangri Area, Jaisalmer, Rajasthan	Latitude:26° 33’38.2” Longitude: 71° 21’1.5”	2.00	DAN-T-59	Latitude: 26° 31’23.4” Longitude: 71° 25’55”	2.00	DAN-T-60	Latitude: 26° 31’6.8”
Investor	Capa city (MW)	Machi ne ID	Location	Latitude/Lon gitude													
Manifold Agricrops Pvt.Ltd.	2.00	DAN-T-12	Malusar, Dangri Area, Jaisalmer, Rajasthan	Latitude:26° 33’38.2” Longitude: 71° 21’1.5”													
	2.00	DAN-T-59		Latitude: 26° 31’23.4” Longitude: 71° 25’55”													
	2.00	DAN-T-60		Latitude: 26° 31’6.8”													

					Longitude: 71° 25' 58.3"
		2.00	DAN-T-61		Latitude: 26° 31' 36.2"
					Longitude: 71° 25' 44.3"
		2.00	DAN-T-88		Latitude: 26° 31' 17.6"
					Longitude: 71° 27' 0.6"
	Parmarth Wind Energy Pvt. Ltd.	0.85	GAL-03	Altur, Shahuwadi, Kolhapur, Maharashtra	Latitude: 17° 0' 13"
					Longitude: 73° 55' 16"
		0.85	GAL-06		Latitude: 16° 59' 59"
					Longitude: 73° 55' 15"
		0.85	GAL-07		Latitude: 16° 59' 51"
					Longitude: 73° 55' 19"
		0.85	GAL-08		Latitude: 16° 59' 45"
					Longitude: 73° 55' 18"
		0.85	GAL-09		Latitude: 16° 59' 56"
					Longitude: 73° 54' 59"
		0.85	GAL-10		Latitude: 16° 59' 50"

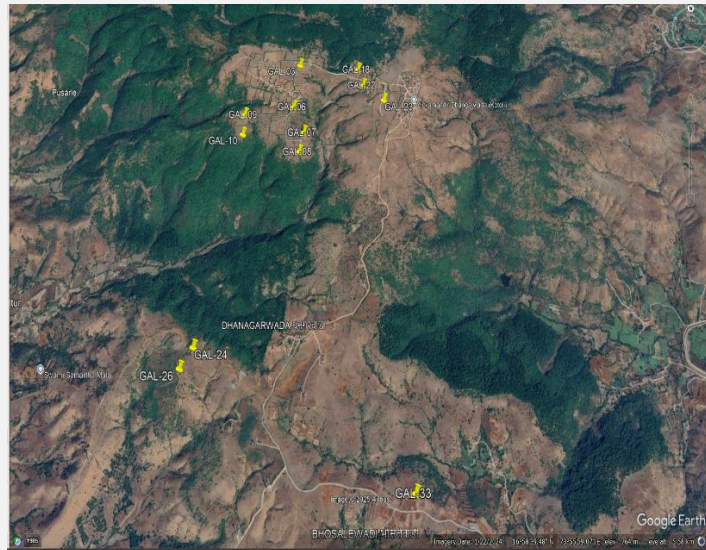
				Longitude: 73°54'59"
	0.85	GAL-18		Latitude: 17°0'12" Longitude: 73°55'36"
	0.85	GAL-22		Latitude: 17°0'7" Longitude: 73°55'38"
	0.85	GAL-23		Latitude: 17°0'2" Longitude: 73°55'45"
	0.85	GAL-24		Latitude: 16°58'53" Longitude: 73°54'52"
	0.85	GAL-26	Karungale, Shahuwadi, Kolhapur, Maharashtra	Latitude: 16°58'48" Longitude: 73°54'49"
	0.85	GAL-33	Kotoli, Shahuwadi, Kolhapur, Maharashtra	Latitude: 16°58'24" Longitude: 73°55'55"
	Sidhidata Power LLP	2.00	MVT-83	Jath, Sangli, Maharashtra Latitude: 17°04'8.1" Longitude: 75°15'17.3"
	Sidhidata Solar Urja Ltd.	5.00		Bhadla, Phalodi, Latitude: 27°30'0"

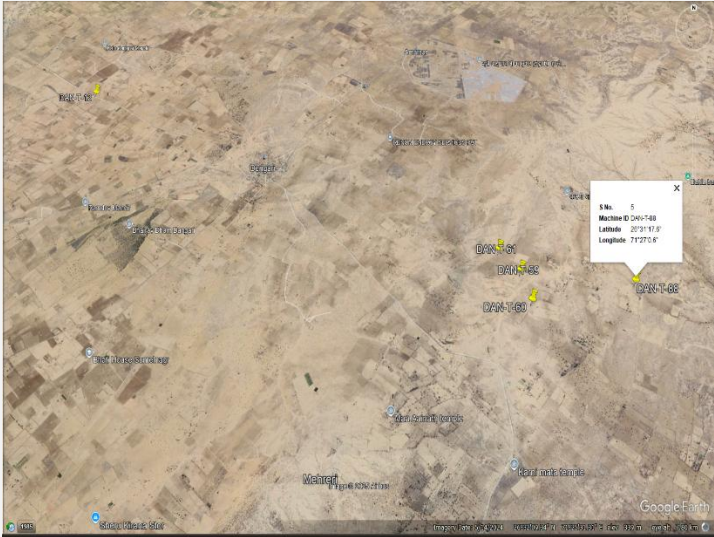
			Jodhpur, Rajasthan	Longitude: 71°54'0"
--	--	--	-----------------------	------------------------

Evidence gathering activities: During desk review assessment team has reviewed location of the project mentioned in the Joint PD&MR/1/ and onsite visit.

Evidence Checked: Assessment team has cross-checked section 1.13: Project location (Geocoordinates) mentioned in Joint PD&MR, and conducted site visit to confirm the locations of districts of state Maharashtra and Rajasthan. Assessment team has used GPS map Camera onsite to confirm the geocoordinates mentioned in Joint PD & MR/1/.

Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment team it is concluded that Project is implemented across multiple districts in state Maharashtra and Rajasthan of India. A representative image of solar and wind power project as per the Google earth Software is depicted below.



	
Conditions prior to project initiation	Conditions prior to project initiation is same as the baseline scenario of this project activity. The baseline scenario identified at the validation of the project activity was the electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid connected power plants and by the addition of new generation sources into the grid. The project activity involved setting up of wind turbines and solar PV modules for generating the power of wind to produce electricity and supply to the grid. In the absence of the project activity, the equivalent amount of power would have been supplied to the electricity grid by the operation of grid-connected power plants (mainly by fossil fuel fired plants) and by the addition of new generation sources, as reflected in the combined margin (CM) calculations. Evidence gathering activities: During desk review assessment team has reviewed section 1.14: Conditions Prior to Project Initiation mentioned in the Joint PD&MR, conducted site visit and interviewed PP representatives. Evidence Checked: Assessment team has cross-checked section 1.14: Conditions Prior to Project Initiation mentioned in the Joint PD&MR with applied methodology ACM0002 version 22.0/7/ in this project activity and confirmed through the physical site visit and interviewed PP representatives. Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment

	team it is concluded that conditions prior to project initiation mentioned in section 1.14 of Joint PD&MR is correct and comply with para 22 of ACM002: Grid-connected electricity generation from renewable sources v22.0/7/ an applied methodology in this project activity//.
Project compliance with applicable laws, statutes and other regulatory frameworks	The project is located in non-Annex 1 country. However, the project activities are mandated by a law, statute, or other regulatory framework. There are no enforced laws, statutes, regulations, court orders, environmental-mitigation agreements, permitting conditions or other legally-binding mandates requiring its implementation, or requiring the implementation of a similar technology/measure that would achieve equivalent levels of GHG emission reductions. There are no new relevant national and/or sectoral policies and/or circumstances in the electricity sector applicable to the Project Activity, in comparison to the time of the submission of the project activity for validation, which could impact the validity of the current baseline for this crediting period. The Project has also received necessary approvals for development and commissioning for each Wind Project & Solar Project from the state Nodal agencies and is in compliance to the local laws and regulations. Following is the list if the key policies, national laws and regulations applicable to develop a wind and solar power project in India: Electricity Act 2003: The act provides a framework for the overall growth of the electricity sector in India. It gives provisions for preferential tariff and quotas for opting for renewable energy. Mandatory procurement of renewable energy for distribution licensees and facilitation of grid connectivity were incorporated. National Electricity Policy 2005: The policy allows preferential tariffs for power produced from renewable energy sources. Integrated Energy Policy, 2006: This integrated policy recommended a particular focus on renewable energy development and set specific targets for capacity addition. Tariff Policy 2006: (As per the national tariff policy, the central and the state electricity regulatory commissions must

purchase a certain percentage of grid-based power from renewable sources.)

Renewable Energy Certificates (RECs), 2011: RECs are a market-based mechanism. It was introduced to enhance renewable energy capacity. It levels the inter-state divergences of renewable energy generation and the requirement of the obligated entities to meet their RPOs with a differentiated price for Wind and non-wind.

The Factories Act 1948: All persons working under the Organizations

Environmental (Protection) Act, 1986 and amendment(s): The Environment (Protection) Act, 1986 authorizes the central government to protect and improve environmental quality, control and reduce pollution from all sources, and prohibit or restrict the setting and /or operation of any industrial facility on environmental grounds.

The Air (Prevention and Control of Pollution) Act, 1981 including Rules 1982 and 1983 and amendment(s).

The Water (Prevention and Control of Pollution) Cess Act 1977 including Rules 1978 and 1991.

Solid Waste Management Rules, 2016/ E-waste (Management) Rules 2016 and amendment(s) / Batteries (Management and Handling) Rules, 2001 and amendment in 2010 (Solid waste/E waste/Batteries management program should be prepared with thrust on reuse and recycling as per the CPCB guidelines).

Evidence gathering activities: During desk review assessment team has reviewed section 1.15 & 3.5.1: Compliance with Laws, Statutes and Other Regulatory Frameworks mentioned in Joint PD&MR, conducted site visit and interviewed PP representatives.

Evidence Checked: Assessment team has checked the compliance of laws mentioned in section 1.15 of Joint PD&MR through interview of PP representatives and physical inspection of site visit.

Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment

	team it is concluded that the implemented project follows above mentioned laws.
Double counting and participation under other GHG programs	Project's GHG Program Status, Cross-Verification of GHG Benefits & Rejection by other GHG programs: The project has not applied under any other GHG program except VCS for current monitoring period, 31-March-2023 to 30-September-2024 (Inclusive of both dates). Evidence Gathering Activities: Assessment team has performed the desk-review to confirm the Project's GHG Program Status, Cross-Verification of GHG Benefits & Rejection by other GHG programs. Evidence Checked: The project has not been registered under any GHG program other than VERRA. Furthermore, double counting issue has also been assessed and the project verification team has also checked the REC, I-REC and this project isn't available within REC and I-REC /19/ database at the time of this report date. Similarly, Gold Standard project database/17/, ICR registry, UCR registry and CerCarbono registry were also checked and this project isn't available within any Standard databases, either at the time of this report date, hence it could be confirmed that the project has not participated or been rejected under any other GHG programs. This was supported from the "No double counting declaration"/29/ submitted by PP in which they have mentioned that they will not claim same GHG emission reductions of the project from any other GHG program except VCS. Rejection by other GHG programs: The Project is not rejected by other GHG programs. A declaration/29/ for the same is checked and found correct by the assessment team. Also, assessment team independently verified with the following registries and checked projects from the PP matching the same project design and found that no such project either exists or were rejected by the registries.
No double claiming with emissions trading programs or binding emission limits	Evidence Gathering Activities: The project is not included in an emissions trading program or any other mechanism that includes GHG allowance trading.

	Evidence Checked: Verification through Declaration: The PP declares through the declaration /29/ that Net GHG emission reductions or removals generated by the Project will not be used for compliance with an emissions trading program or to meet binding limits on GHG emissions in any Emission Trading program or other binding limits any specific monitoring period under two mechanisms. Assessment Conclusion: The assessment team confirms that the GHG emission reductions or removals generated by the project have not been included in any emissions trading program or any other mechanism that includes GHG allowance trading.
No double claiming with other forms of environmental credit	Evidence Gathering Activities: The project has not sought or received another form of GHG-related environmental credit. Issuance Records Confirmation: The assessment team has also cross-checked the issuance records available on the Verra website and thus confirmed & ensured that the emission reduction generated from the project activity are not & will not be double counted hence accepted by the assessment team. Evidence Checked: Verification through Declaration: The PP declares through the declaration /29/ that the project has sought or received another form of GHG-related environmental credit, including REC (renewable energy certificates) & I-REC (International- renewable energy certificates) during this monitoring period. Assessment Conclusion: Assessment team confirms that the project does not seek or receive any other form of GHG-related environmental credit. Via interview with the project proponent and based on above assessment, it is confirmed that the project has not created any other form of environmental credit. A self-declaration/29/ is also submitted by PP to VVB for no double claiming, ensuring that emission reduction generated by the project activity is not double counted in current monitoring period.

Supply chain (Scope 3) emissions double claiming	Evidence Gathering Activities: Since, the project Activity is a solar and Wind power project and does not involve any supply chain in the project such as manufacturers, wholesalers, distributors and retailers. So, no indirect upstream and downstream GHG emissions are involved in the project activity. Thus, the Scope 3 emissions are not applicable in this project activity. Evidence Checked: Verification through the registered PD /4/, Previous verification reports/5/ and witness of the project activity and interviews conducted during the onsite visit. Assessment Conclusion: The project activity, the emissions reductions are due to the generation of electricity energy by the utilization of wind velocity/solar power and further selling the generated energy to the respective Grid. Therefore, the project activities will not impact the emissions of goods and services in a supply chain, i.e., Scope 3 emissions. Thus, this section is not applicable.
Sustainable development contributions	Evidence Gathering Activities: Via on-site inspection, checking the evidence provided as below and interview with the project implementer As per the VCS Standard version 4.7/13/, section 3.17.1, it is required by the project proponent to “demonstrate that a project contributes to at least three SDGs by the end of the first monitoring period, and in each subsequent monitoring period”. VKU verified that the project contributes the sustainable development through the following aspects: 7.2.1 i.e. (Renewable energy share in the total final energy consumption) About 396,163.56 MWh of renewable electricity has been supplied to Indian Electricity grid during the current monitoring period which helps to increase the renewable energy share in the energy mix. As a part of this project activity lifetime, a total of 396,163.56 MWh(57,992+103,169+76,635+61,184+45,172.20+52,011.36) of renewable electricity has been supplied to the Indian grid by the project activity since commissioning.

	8.5 i.e. (Number of People Employed) A total of 20 people are employed during this reporting period and 20 people are employed since the start date of the project activity due to the installation of this project. 13.2.2: (Tonnes of greenhouse gas emissions avoided or removed) Total greenhouse gas emissions by generating 52,011.36 MWh of renewable electricity the project has avoided the emission of 44,788 tCO_{2e} in the atmosphere. Due to installation of this project activity PP has prevented the release of emission of 381,016 tons of carbon (56,658+100,794+74,871+59,776+44,129+44,788) into the atmosphere. Thus, proving that the project generated eco-friendly, GHG free power which contributes to sustainable development of the region. Evidence Checked: The above stated SDGs contributions has been verified via following means. SDG 7.2 & 13 - VVB has referred previous verification reports approved by VERRA /05/, JMRs/20/, Invoices/20/ SDG 8.5 -verified by the assessment team from the employment records /25/ submitted by the PP to the VVB. Along with that assessment team interviewed the new employees hired during the current monitoring period to confirm about minimum wage requirement if followed at site. Assessment conclusion: Assessment team confirmed that PP is stringently following the state regulations for minimum wage criteria. VKU found the above claimed SDGs contributions correct and deemed satisfactory.
Additional information relevant to the project	• Leakage Management: Not applicable since leakage emissions from the project activity is zero as per methodology ACM0002: Grid-connected electricity generation from renewable sources Version 22.0/7/. • Commercially Sensitive Information: No commercially sensitive information has been excluded from the public version of the project description.

3.2 Project Activity Instances in Grouped Projects

This section is not applicable as this is not a group project. The project involves installation of Wind and Solar power of total capacity 27.20 MW located at different states Rajasthan and Maharashtra. The project has individual sub project investors but the Project Proponent and ownership is with LNB Renewable Energy Private Limited.

3.3 Safeguards

3.3.1 Stakeholder Engagement and Consultation

3.3.1.1 Stakeholder Identification

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Stakeholder identification	Following stakeholders have been identified for this project activity 1. Local community members 2. Local village administration 3. Technology suppliers 4. Local vendors 5. Employees Evidence-gathering activities: Assessment team conducted onsite interviews to verify the stakeholder identification in the project. Evidence checked: Stakeholders consultation report/Photos and onsite interviews with PP and stakeholders. Assessment conclusion: Based on the evidence gathered and with a thorough of stakeholder's details in the project activity. The assessment team has carried out on-site interviews to assess the information included in the joint PD&MR and local stakeholder consultation report. During the desk review, the relevant records related to project activity, implementation and operation were checked and by conducting on-site interviews with stakeholders and relevant project personals were taken.
Legal or customary tenure/access rights	There is no legal or customary tenure/access rights to territories and resources, including collective and conflicting rights, held by

	stakeholders, indigenous people (IPs), local communities (LCs), and customary rights holders as project activity involves implementation of solar and wind technology. Evidence-gathering activities: Desk review and onsite assessment Evidence checked: Onsite interview with concerned personnel Assessment conclusion: Based on interviews during the onsite visit /38/ VVB concludes that there is no legal or customary tenure/access rights to territories and resources, including collective and conflicting rights, held by stakeholders, indigenous people (IPs), local communities (LCs), and customary rights holders.
Stakeholder diversity and changes over time	Evidence gathering activities: Desk review and onsite assessment Evidence checked: Onsite interview with concerned personnel Assessment conclusion: It has been confirmed during onsite visit consultations with stakeholders that the social, economic, and cultural diversity within stakeholder groups remained stable over time and there are no significant changes in the composition of each group observed during the monitoring period. PP has maintained continuous interactions and ongoing communication with stakeholders to monitor any changes in the composition of stakeholder groups during the monitoring period.
Expected changes in well-being	As per the Joint PD and MR- By implementing solar and wind power projects, fewer emissions would have otherwise been caused due to conventional power generation methods. The paramount well-being of the stakeholders that change is the reduction in GHG emissions. Compared to the baseline scenario, the project implementation helps reduce GHG emissions. Site visit was conducted by assessment team to confirm the implementation of the project activity and local stakeholder interviews /38/ were also conducted.
Location of stakeholders	1. Jaisalmer, Rajasthan 2. Kolhapur, Maharashtra 3. Sangli, Maharashtra 4. Bhadhla, Jodhpur, Rajasthan

	Evidence gathering activities: Desk review and onsite assessment Evidence checked: Onsite interview with concerned personnel Assessment conclusion: During the onsite visit, the VVB conducted interviews with local stakeholders and confirmed that all stakeholders are from near villages. Additionally, there are no areas outside the project boundary that are affected by the project.
Location of resources	The geographical boundary of the project in India and the geographical location of the project activity is districts of Maharashtra and Rajasthan. Hence, the stakeholders belong to the villages that are under the both states in India. There are no areas outside the project boundary that get impacted by the project. Evidence gathering activities: Onsite Assessment and interview Evidence checked: Onsite interviews with stakeholders/38/ Assessment conclusion: Interview with stakeholders and physical inspection of project location with the help of GPS Map camera/36/, it can be concluded that land acquisition did not result in rehabilitation and resettlement. There is no settlement on the land acquired. Therefore, no territories and resources of stakeholders directly intersect with the project area. This ensures the compliance with relevant standards and best practices related to land ownership, acquisition, and stakeholder engagement. The evidence demonstrates that the project was developed without infringing on stakeholders' territories and resources, and the land acquisition process was conducted through willing transactions without any displacement or resettlement requirements.

3.3.1.2 Stakeholder Consultation and Ongoing Communication

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Stakeholder engagement process	Before the implementation of project, the stakeholder's consultation meeting was held on: 1. Manifold Agri crops Pvt. Ltd (Jaisalmer, Rajasthan): 25-February-2015 2. Parmarth Wind Energy Pvt. Ltd. (Kolhapur, Maharashtra): 26-February-2015

	3. Sidhidata Power LLP (Sangli, Maharashtra): 27-February-2015 4. Sidhidata Solar Urja Ltd. (Bhadhla, Jodhpur, Rajasthan): 28-February-2015 All the stakeholders were invited through submission of the invitation letter and Public Notice to attend the stakeholders meeting on 11-February-2015 and this invitation was posted in multiple locations in the regional language within the vicinity of all project instances. Evidence gathering activities: Desk review and interviews during onsite visit with local stakeholders/38/ Evidence checked: stakeholder consultation report and onsite interviews with PP representatives and other local stakeholders. Assessment conclusion: Based on the evidence gathered and interviews during onsite visit assessment team concludes that information included in section 2.1.2: Stakeholder consultation and ongoing communication of the joint PD&MR are found correct/1 /.
Consultation outcome	Feedback from the stakeholders present during the meeting was very positive no negative comments were received during the local stakeholder meeting. All stakeholders supported the need of the carbon credit project and its potential in climate change mitigation. Evidence gathering activities: Desk review and interviews during onsite visit with local stakeholders/38 / Evidence checked: stakeholder consultation report, Stakeholders feedback and onsite interviews/38/ with PP representatives and other local stakeholders. Assessment conclusion: Based on the evidence gathered and interviews during onsite visit assessment team concludes that information included in section 2.1.2: Stakeholder consultation and ongoing communication of the joint PD&MR are found correct/1/.
Ongoing communication	Stakeholder's consultation is a continuous process and hence a grievance register is kept in the communication room of the company gate where any stakeholder can come and share his/her feedback. The feedback received is taken care by PP with utmost priority. During current monitoring period, no negative comments from local or nearby stakeholders were received. Evidence gathering activities: Desk review and interviews during onsite visit with local stakeholders/38/

	Evidence checked: stakeholder consultation report, Stakeholders feedback during onsite interviews with PP representatives and other local stakeholders. Assessment conclusion: Based on the evidence gathered and interviews during onsite visit assessment team concludes that information included in section 2.1.2: Stakeholder consultation and ongoing communication of the joint PD&MR are found correct/1/.
Stakeholder input	Stakeholders input was positive and no grievance were raised regarding project.

3.3.1.3 Free, Prior, and Informed Consent

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Obtaining consent	Evidence-gathering activities: Desk review and interviews during onsite visit with local stakeholders/38/ Evidence checked: stakeholder consultation report, Stakeholders feedback during onsite interviews with PP representatives and other local stakeholders. Assessment conclusion: Consent from concerned parties, including local communities (LCs) was obtained through a transparent and inclusive process. This involved engaging in meaningful dialogue, providing relevant information in accessible formats, and addressing any concerns or questions raised. Agreements were reached through consensus-building and ensuring that all parties had the opportunity to express their views and negotiate terms. Transparency was maintained by documenting the process and agreements reached and ensuring that all stakeholders understood the implications of their consent.
Outcome of FPIC discussion	Evidence Gathering Activities: Reviewed the Free, Prior, and Informed Consent (FPIC) process. Verified the transparency agreement between the project proponent and concerned parties, including local communities (LCs). Checked the disclosure of comprehensive project information, potential impacts, and mitigation measures to

stakeholders during the Local Stakeholder Consultation (LSC). Confirmed the accessibility of information provided, including the use of local languages. Verified the project proponent's declaration regarding no encroachment of land, non-relocation of people, and avoidance of forced physical or economic displacement.

Evidence Checked: Personal interviews and focused group discussion with the PP and site in-charge.

Assessment Conclusion: Based on the evidence gathered and reviewed, it is confirmed that:

- The outcome of the FPIC process resulted in a transparent agreement between the project proponent and all concerned parties, including local communities (LCs).
- Prior to establishing the agreement, comprehensive information regarding the project's scope, potential impacts, and mitigation measures was disclosed to stakeholders in accessible formats and local languages during the LSC.
- The project proponent has declared that the project has not encroached on any land, does not relocate people, or cause forced physical or economic displacement. All project activities have been conducted in accordance with regulatory norms and terms outlined in the transparent
- Agreement, ensuring the protection of rights and interests of all stakeholders involved.
- The audit has verified the FPIC process, the establishment of a transparent agreement, the disclosure of relevant information, and compliance with regulatory norms and agreed terms, thereby confirming the protection of stakeholder rights and interests.

3.3.1.4 Grievance Redress Procedure

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Development process	Evidence gathering activities: - Reviewed the grievance register or relevant records to verify if any grievances were received during the current monitoring period. - Checked the procedures for grievance resolution, including steps taken to address grievances and document the outcomes. Evidence checked: Grievance Register/27/, Stakeholders feedback during onsite interviews with PP representatives and other local stakeholders. Assessment conclusion: No grievances were raised during the current monitoring period (31-March-2023 to 30-September-2024 Inclusive of both dates). However, the stakeholders can register their grievances in the Grievance Register which is kept at project site office where any stakeholder can come and register his/her feedback.
Grievance redress procedure	Evidence gathering activities: Desk review and interviews during onsite visit with local stakeholders/38/ Evidence checked: Grievance Register/27/, Stakeholders feedback during onsite interviews with PP representatives and other local stakeholders. Assessment conclusion: Grievance redress procedure ensures individual grievances are adequately prioritized and addressed and stakeholder's feedback is monitored daily and any grievance if found, resolved immediately.

3.3.1.5 Public Comments

This is the renewable crediting period of this project activity. The project sought the registration with the VCS Program, according to VCS requirement the Project Description was submitted for public comment period during validation.

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
No comments received	Since there were no comments received during the current monitoring	Evidence Gathering Activities:

	period, no actions were taken and there are no updates to project design.	• Reviewed records to verify if any comments were received outside the public comment period and during the current monitoring period. • Checked the grievance register and complaint/suggestion box for any feedback received from stakeholders. • Reviewed records of the Local Stakeholder Consultation during the validation phase to understand the comments and concerns raised by stakeholders. Assessment Conclusion: Based on the evidence gathered and reviewed, it is confirmed that: No comments were received outside the public comment period and during the current monitoring period. The grievance register demonstrates the PP's commitment to ongoing stakeholder engagement and feedback mechanisms.
--	--	---

3.3.2 Risks to Local Stakeholders and the Environment

3.3.2.1 Management Experience

Evidence gathering activities- Through the onsite visit and Interviews

Evidence checked- Onsite visit, interviews & focused group discussion, O&M agreement/38/

Assessment Conclusion- Based on, the onsite visit interviews, review of the O&M agreement /30/ (O&M entity for current monitoring period), collectively affirm that the management team leading the solar and wind project possesses significant expertise and experience in executing similar renewable energy initiatives. Their successful track record in project design, community engagement, and overall implementation reinforces their capability to manage the project effectively. This established proficiency ensures that all project activities will be aligned with the project's goals, paving the way for successful outcomes. The extensive experience of the existing management team, there has been no need to involve new entities or form partnerships with other organizations for this project. The team's established track record ensures that all project activities are managed effectively and in alignment with the project's goals.

Table 08: O & M team involved in this project is mentioned below:

Project Investor	O&M Team Involved
Manifold Agricrops Pvt. Ltd.	INOX Green Energy Services Ltd.
Parmarth Wind Energy Pvt. Ltd.	Siemens Gamasa Renewable Power Pvt. Ltd. (Previous O&M team involved before 29-May-2024) Ever Renew Energy Pvt. Ltd. (New O&M team involved from 29-May-2024)
Sidhidata Power LLP	INOX Green Energy Services Ltd.
Sidhidata Solar Urja Ltd.	LNB Renewable Energy Limited (In house O&M)

3.3.2.2 Risk Assessment

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Natural and human-induced risks to stakeholders' wellbeing	The project is a solar and wind power project hence, no risk is identified regarding natural and human induced risks to stakeholder wellbeing.
Risks to stakeholder participation	There is no risk identified to stakeholder participation as Input/Grievance Register is maintained at company gate. Any stakeholder can give their inputs/comments which will be further resolved.
Working conditions	There is no risk identified as LNB Renewable Energy Private Limited has initiated a customized training program for their engineers and plant operators.

	Assessment team has also confirmed thus during onsite visit through interview.
Safety of women and girls	There is no risk identified as No Discrimination Policy is followed by PP. Also, due to remote locations of the sites no any girls and women have been working at the site.
Safety of minority and marginalized groups, including children	No risk is identified to safety of minority and marginalized groups, including children and is following Child Labor (Prohibition & Regulation) Act, 1986 prohibits employment of children.
Pollutants (air, noise, discharges to water, generation of waste, release of hazardous materials, and chemical pesticides and fertilizers)	No risk identified as this the solar wind technology power project which is environment friendly.

3.3.3 Respect for Human Rights and Equity

3.3.3.1 Labor and Work

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Discrimination	No risk identified. Evidence gathering activities: Desk review and onsite assessment Evidence checked: Onsite interviews with concerned personnel/38/, grievance records/27/. Assessment conclusion: Assessment team has reviewed the monitoring plan and monitoring system in joint PD&MR and conduct onsite interview with concerned personal to cross verify that There were no cases of discrimination during the current monitoring period of the project. Discrimination based on gender is prohibited, and strict rules are in place to address sexual harassment.
Sexual harassment	No risk identified

	Evidence gathering activities: Desk review and onsite assessment Evidence checked: Onsite interviews with concerned personnel/38/, grievance records/27/, Assessment conclusion: Assessment team has reviewed the monitoring plan and monitoring system in joint PD&MR and conduct onsite interview with concerned personal to cross verify that There were no cases of sexual harassment during the current monitoring period of the project. PP do not involve and promote any discrimination about the gender differences.
Equal pay for equal work	No risk identified Evidence gathering activities: Desk review and onsite assessment Evidence checked: Onsite interviews with concerned personnel Assessment conclusion: Based on the evidence gathered and interviews during onsite visit assessment team concludes that information included in section 2.3.1: Equal pay for equal work of the joint PD&MR are found correct/1/.
Gender equity in labor and work	No risk identified. Evidence gathering activities: Desk review and onsite visit Evidence checked: Onsite interviews with concerned personnel/38/ and grievance records/27/. Assessment conclusion: Based on the evidence gathered and interviews during onsite visit assessment team concludes that information included in section 2.3.1: Respect for Human Rights and Equity of the joint PD&MR are found correct/1/. The Project activity has an equal opportunity for women, men, or any vulnerable/ marginalized community by considering the country's laws and regulations to contribute both in volunteer and working positions.
Forced labor	No risk identified. Evidence gathering activities: Onsite visit and interview with the concerned personal/38/

	Evidence checked: onsite interviews with concerned personnel/38/ Assessment conclusion: Assessment concludes based on the onsite assessment of project activity that the project does not involve any forced labor. Moreover, project requires skilled labor for the implementation and maintenance of project activity, hence no form of child labor is involved in the project
Child labor	No risk identified. Evidence gathering activities: Onsite visit and interview with the concerned personal/38/ Evidence checked: onsite interviews with concerned personnel/38/ Assessment conclusion: Assessment concludes based on the onsite assessment of project activity that the project does not involve any child labor in any form. Moreover, project requires skilled labor for the operation and maintenance of project activity, hence no form of child labor is involved in the project
Human trafficking,	No risk identified. Evidence gathering activities: Onsite visit and interview with the concerned personal/38/. Evidence checked: Onsite interviews with concerned personnel/38/ Assessment Conclusion: PP is vehemently opposed to and actively combats human trafficking in all aspects of its operations. The company is dedicated to upholding ethical standards and ensuring that its supply chain and business practices are free from any form of exploitation.

3.3.3.2 Human Rights

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risks identified	Evidence gathering activities: Desk review and onsite assessment Evidence checked: Onsite interviews with concerned personnel/38/

	Assessment conclusion: Based on the desk review and onsite interviews with concerned personnel/38/, it was confirmed that the project activity abides with human rights outlined in national and regional regulations. No human rights are violated in the installation and operation of project activity. The project activity is following anti-discrimination practices and follow the Human rights moral principles and PP prepared Anti-discrimination Policy before implementation of the project activity. Facility employees are hired and contracted without discrimination based on gender, race, caste, national origin, religion, age, disability, marital status, sexual orientation, cooperative membership, or political affiliation Based on the onsite observation, there is no forced labour, child labour or human trafficking involved in the project activity. It is confirmed that the project is implemented in accordance with section 3.19.11, 3.19.12, 3.19.13, 3.19.14. 3.19.15, 3.19.16, 3.19.17, 3.19.18 of VCS Standard version 4.7./13/
--	--

3.3.3.3 Indigenous Peoples and Cultural Heritage

Risk identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risks identified	PP is committed to protect regional as well as national cultural heritage and the project activity is not affecting the any regional or national cultural heritage.

3.3.3.4 Property Rights

Risks identified	Evidence gathering activities, evidence checked, and assessment conclusion
No risk identified	Not applicable. There were no disputes over territories or resources during the current monitoring period. Also, Regular consultations and grievance mechanisms are maintained to address any concerns promptly if any.

3.3.3.5 Benefit Sharing

Item	Evidence gathering activities, evidence checked, and assessment conclusion
------	--

Process used to design the benefit sharing plan	Evidence gathering activities: During desk review assessment team has reviewed the Joint PD&MR, conducted site visit and interviewed PP representatives. Evidence Checked: Assessment team has cross-checked the project ownership mentioned in the Joint PD&MR through the physical inspection /39/of the project activity and interview of project representatives. Assessment Conclusion: On the basis of the evidence gathering activities and the evidences cross-checked by the assessment team it is concluded that section 2.3.5 of Joint PD&MR /1/has been checked, Via checking the Project contract contractual agreement between involve party and interviewing with the representative through the on-site visit/38/ it is verified that the ownership rights of the carbon assets generated from this project will be with LNB Renewable Energy Private Limited. Therefore, this section is not applicable.
Summary of the benefit sharing plan	During the site assessment, it was observed that- there is no community benefit-sharing program as the Project participants have carbon rights. The benefit-sharing agreement is implemented between the project proponent and the project implementor. Additionally, the assessment team checked the agreement submitted by PP to verify the carbon rights.
Approval and dissemination of benefit sharing plan	During the site assessment, it was observed that the process was not applicable. Since there is no usage of the property rights of stakeholders. However, the benefit-sharing agreement was agreed upon by the project proponent and the project implementor, and the agreement was shared in a culturally appropriate manner.
Benefit sharing during the monitoring period	During the site assessment, it was observed that the process was not applicable as there is no usage of the property rights of stakeholders. Additionally, this was confirmed via interviews with stakeholders/38/.

3.3.4 Ecosystem Health

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Impacts on biodiversity and ecosystems	During the site visit via site inspection and interviews/38/, it was confirmed that- there are no threatened or endangered biodiversity (flora and fauna) species and protected areas known to exist within the project site. It is

	expected that any activities during the installation & operations phase are likely to cause minimal impacts on the vegetation of project area. O&M team also maintains Bird strike register to observe carcasses in vicinity of the WTGs.
Soil degradation and soil erosion	During the site visit via site inspection and interviews/38/, it was confirmed that- the installation of solar panels and WTGs will not have a significant impact on soil erosion.
Water consumption and stress	During the site visit via site inspection and interviews/38/, it was confirmed that- this Project Activity does not involve water-consuming activities that might cause stress in water resources. Thus, an assessment of water consumption and stress risks is not applicable to this Project Activity.

3.3.4.1 Rare, Threatened, and Endangered species

Risk identified	Evidence gathering activities, evidence checked, and assessment conclusion
Species and habitat	Not Applicable: The project is located in Rajasthan and Maharashtra and there are no rare, threatened or endangered species found during the current monitoring period.
Areas needed for habitat connectivity	Not Applicable: The project is located in Rajasthan and Maharashtra and has not adversely impacted areas needed for habitat connectivity during the monitoring period.

3.3.4.2 Introduction of Species

Species introduced	Evidence gathering activities, evidence checked, and assessment conclusion
Not Applicable	The assessment team verified via site inspection/39/ that; the solar and wind project is located in different states of India and the site has not introduced any species in the project activity locations.

Existing invasive species	Evidence gathering activities, evidence checked, and assessment conclusion
Not Applicable	The assessment team verified via site inspection/39/ that; the solar and wind project is located in different states of India and the site does not have any existing invasive species in the project activity locations.

Evidence gathering activities, evidence checked, and assessment conclusion	
Invasive species	The assessment team verified via site inspection/39/ that; the solar and wind project is located in different states of India and the site has not introduced any invasive species in the project activity locations.

3.3.4.3 Ecosystem conversion

Risks Identified	Evidence gathering activities and evidence checked
Ecosystem conversion	Not Applicable- The project is not an ARR, ALM, WRC or ACoGS project and hence this section is not applicable.

3.4 Application of Methodology

3.4.1 Title and Reference

Type (methodology, tool or module)	Reference ID, if applicable	Title	Version
Methodology	ACM0002	Grid-connected electricity generation from renewable sources	22.0
Tool	Tool 01	Tool for the demonstration and assessment of additionality	07.0
Tool	Tool 07	Tool to calculate the emission factor for an electricity system	07.0
Tool	Tool 11	Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period	3.0.1

3.4.2 Applicability

The applicability of the methodology and tools selected by the project proponent is provided in below table.

Methodology ID	Applicability condition	Assessment
ACM0002: Grid-connected electricity generation from renewable sources version 22.0	1) This methodology is applicable to grid connected renewable energy power generation project activities that: a) Install a Greenfield power plant; b) Involve a capacity addition to (an) existing plant(s); c) Involve a retrofit of (an) existing operating plants/units; d) Involve a rehabilitation of (an) existing plant(s)/unit(s); or e) Involve a replacement of (an) existing plant(s)/unit(s). f) Install a Greenfield power plant together with a grid-connected Greenfield pumped storage power plant. The greenfield power plant may be directly connected to the PSP or connected to the PSP through the grid.	The project activity is installation of a new grid connected wind/solar power plant at a site where no renewable power plant was operated prior to the implementation of the project activity. The project activity will replace electricity from the Indian grid, which is primarily powered by fossil fuel-based plants. Thus, it falls under applicability criteria option 1 (a) i.e., “Install a Greenfield power plant” and hence this criterion is applicable.
...	2) In case the project activity involves the integration of a BESS, the methodology is applicable to grid-connected renewable energy power generation project activities that:	The project activity does not have a battery energy storage system as this is a solar and wind technology implemented power plant. Thus, this criterion is not applicable.

	(a) Integrate BESS with a Greenfield power plant; (b) Integrate a BESS together with implementing a capacity addition to (an) existing solar photovoltaic or wind power plant(s)/unit(s); (c) Integrate a BESS to (an) existing solar photovoltaic or wind power plant(s)/unit(s) without implementing any other changes to the existing plant(s); (d) Integrate a BESS together with implementing a retrofit of (an) existing solar photovoltaic or wind power plant(s)/unit(s). (e) Integrate a BESS together with a Greenfield power plant that is operating in coordination with a PSP. The BESS is located at site of the greenfield renewable power plant.	
	3) The methodology is applicable under the following conditions: (a) Hydro power plant/unit with or without reservoir, wind power plant/unit,	The project activity is not a Hydro power project, and also it does not have BEES. It is a solar and wind power project which involves operation of 18 WTGs and 1 solar plant. Hence this is not applicable.

	geothermal power plant/unit, solar power plant/unit, wave power plant/unit or tidal power plant/unit; (b) In the case of capacity additions, retrofits, rehabilitations or replacements (except for wind, solar, wave or tidal power capacity addition projects) the existing plant/unit started commercial operation prior to the start of a minimum historical reference period of five years, used for the calculation of baseline emissions and defined in the baseline emission section, and no capacity expansion, retrofit, or rehabilitation of the plant/unit has been undertaken between the start of this minimum historical reference period and the implementation of the project activity; (c) In case of Greenfield project activities applicable under paragraph 5 (a) above, the project participants shall demonstrate that the BESS was an integral part of the design of	
--	---	--

	the renewable energy project activity (e.g., by referring to feasibility studies or investment decision documents); (d) The BESS should be charged with electricity generated from the associated renewable energy power plant(s). Only during exigencies may the BESS be charged with electricity from the grid or a fossil fuel electricity generator. In such cases, the corresponding GHG emissions shall be accounted for as project emissions following the requirements under section 5.4.4 below. The charging using the grid or using fossil fuel electricity generator should not amount to more than 2 per cent of the electricity generated by the project renewable energy plant during a monitoring period. During the time periods (e.g., week(s), months(s)) when the BESS consumes more than 2 per cent of the electricity for charging, the project participant shall not	
--	---	--

	be entitled to issuance of the certified emission reductions for the concerned periods of the monitoring period. (e) In case the project activity involves PSP, the PSP shall utilize the electricity generated from the renewable energy power plant(s) that is operating in coordination with the PSP during pumping mode.	
	4) In case of hydro power plants, one of the following conditions shall apply: (a) The project activity is implemented in existing single or multiple reservoirs, with no change in the volume of any of the reservoirs; or (b) The project activity is implemented in existing single or multiple reservoirs, where the volume of the reservoir(s) is increased and the power density, calculated using equation (7), is greater than 4 W/m²; or (c) The project activity results in new single or multiple reservoirs and the power density, calculated	The project activity is a grid connected wind and solar power project and not a hydro power plant confirmed through physical inspection of the project site. Therefore, these criteria are not relevant for this project activity.

	using equation (7), is greater than 4 W/m²; or (d) The project activity is an integrated hydro power project involving multiple reservoirs, where the power density for any of the reservoirs, calculated using equation (7), is lower than or equal to 4 W/m², all of the following conditions shall apply: (i) The power density calculated using the total installed capacity of the integrated project, as per equation (8), is greater than 4 W/m²; (ii) Water flow between reservoirs is not used by any other hydropower unit which is not a part of the project activity; (iii) Installed capacity of the power plant(s) with power density lower than or equal to 4 W/m² shall be: a. Lower than or equal to 15 MW; and	
--	--	--

	b. Less than 10 per cent of the total installed capacity of integrated hydro power project.	
	5) In the case of integrated hydro power projects, project participants shall: a. Demonstrate that water flow from upstream power plants/units spill directly to the downstream reservoir and that collectively constitute to the generation capacity of the integrated hydro power project; or b. Provide an analysis of the water balance covering the water fed to power units, with all possible combinations of reservoirs and without the construction of reservoirs. The purpose of water balance is to demonstrate the requirement of specific combination of reservoirs constructed under CDM project activity for the optimization of power output. This demonstration has to be carried out in the specific scenario of water availability in different seasons to optimize the water flow at the inlet of power units. Therefore, this water balance will take into account seasonal flows from river, tributaries (if any), and rainfall for minimum of five years prior to the implementation of the CDM project activity.	The project activity is a grid connected wind and solar power project and not a hydro power plant. Therefore, these criteria are not relevant for this project activity.

	6) The methodology is not applicable to: (a) Project activities that involve switching from fossil fuels to renewable energy sources at the site of the project activity, since in this case the baseline may be the continued use of fossil fuels at the site; (b) Biomass fired power plants/units	a) The project activity is installation of a new grid connected wind and solar power project and does not involve switching from fossil fuel to renewable energy as confirmed during onsite visit through interview with representative of PP and local stakeholders and found correct. Hence, this criterion is not relevant to the project activity. b) This is a wind and solar power plant and not a biomass fired plant and hence this criterion is not applicable to the project activity.
	7) In the case of PSP, the project participants shall demonstrate in the PDD that the project is not using water which would have been used to generate electricity in the baseline.	The project is not a hydropower project, so water has not been used to generate electricity in the baseline. The baseline scenario of this project is as per section 5.2 and sub section 5.2.1 of the applied methodology i.e. the electricity supplied to the grid by the project activity would have otherwise been generated by existing grid-connected power plants and new generation sources. Therefore, this criterion is not applicable.
	8) In the case of retrofits, rehabilitations, replacements, or capacity	The project activity is a new grid connected wind and solar power plant and not a

	additions, this methodology is only applicable if the most plausible baseline scenario, as a result of the identification of baseline scenario, is “the continuation of the current situation, that is to use the power generation equipment that was already in use prior to the implementation of the project activity and undertaking business as usual maintenance”.	retrofits, replacement or capacity additions and therefore this criterion is not applicable to the project activity
Tool 01	1) The use of the “Tool for the demonstration and assessment of additionality” is not mandatory for project participants when proposing new methodologies. Project participants may propose alternative methods to demonstrate additionality for consideration by the Executive Board. They may also submit revisions to approved methodologies using the additionality tool.	The project is not proposing any new methodologies, hence the use of the “Tool for the demonstration and assessment of additionality” is mandatory. Only the latest version of the applied methodology, Version 22, available on the CDM webpage, has been used.
	2) Once the additionally tool is included in an approved methodology, its application by project participants using this methodology is mandatory.	This is the Renewable of crediting period and as per section 3.9 and subsection 3.9.8 (1) of VCS standard version 4.7/13/ reassessment of additionality is not required at the time RCP. The additionality has been assessed during validation of this project using

		tool 7: “Tool for demonstration and assessment of Additionality” Version 07.0.0. Steps of this tool are applied in the section 2.5 of registered PD version 3.0 dated 24-March-2015 available on the project webpage.
Tool 07	1) This tool may be applied to estimate the OM, BM and/or CM when calculating baseline emissions for a project activity that substitutes grid electricity that is where a project activity supplies electricity to a grid or a project activity that results in savings of electricity that would have been provided by the grid (e.g., demand-side energy efficiency projects).	The project is a grid connected Greenfield wind and solar power project and thus this tool is used to calculate the emission factor for an electricity system.
	2) Under this tool, the emission factor for the project electricity system can be calculated either for grid power plants only or, as an option, can include off-grid power plants. In the latter case, two sub-options under the step 2 of the tool are available to the project participants, i.e., option II a and option II b. If option II a is chosen, the conditions specified in “Appendix 1: Procedures related to off-grid power generation” should be	This project uses ACM0002, v22, which refers this tool. Emission factor has been sourced from CENTRAL ELECTRICITY AUTHORITY: CO₂ BASELINE DATABASE, VERSION 20.0 dated December-2024⁵.

⁵ https://cea.nic.in/wp-content/uploads/2021/03/User_Guide_Version_20.0.pdf

	met. Namely, the total capacity of off-grid power plants (in MW) should be at least 10 per cent of the total capacity of grid power plants in the electricity system; or the total electricity generation by off-grid power plants (in MWh) should be at least 10 per cent of the total electricity generation by grid power plants in the electricity system; and that factors which negatively affect the reliability and stability of the grid are primarily due to constraints in generation and not to other aspects such as transmission capacity.	
	3)In case of CDM projects the tool is not applicable if the project electricity system is located partially or totally in an Annex I country.	Project is located in non-Annex I country that is India and hence the tool is applicable for this project activity.
	4)Under this tool, the value applied to the CO ₂ emission factor of biofuels is zero.	The project is a Wind and solar project and there is no involvement of biofuels. This has been verified during onsite visit by the assessment team therefore, this criterion is not applicable.
Tool 11	1)This tool provides a stepwise procedure to assess the continued validity of the baseline and to update the baseline at the renewal of a crediting period, as required by paragraph 49 (a) of the modalities and	The project activity follows a renewable crediting period of 10 years, which can be renewed up to two times. It is now undergoing renewal for the next 10-year period (31-March-2023, to 30-March-2033). Section 3.9 and

	procedures of the clean development mechanism.	Subsection 3.9.8 (2) of VCS standard V4.7 have been cross-checked by the assessment team to evaluate the original baseline scenario using the latest version of the CDM Tool to verify the validity of the original/current baseline.
	2)The tool consists of two steps. The first step provides an approach to evaluate whether the current baseline is still valid for the next crediting period. The second step provides an approach to update the baseline in case that the current baseline is not valid anymore for the next crediting period.	The baseline scenario remains unchanged. However, the approach for calculating the baseline emission factor has been updated from the registered PD from validation. It now follows the latest version latest version (Version 20.0 of CEA data base) ⁶ of database available.

3.4.3 Project Boundary

According to methodology ACM0002 version 22.0, the project boundary includes wind/solar PV power generation system and all other power plants connected physically to the local grid to which the proposed project supplies renewable electricity to avoid GHG emissions. The proposed project is located in NEWNE grids of the Indian Electricity system.

To establish the project boundary, the solar project has identified all potential greenhouse gas emission sources, sinks, and reservoirs within its scope. This includes grid electricity generation, baseline electricity generation, and the solar project area for project activities.

During the site visit and document review, the VVB team assessed the following documents:

- Commissioning certificate
- PPA
- Employment records

⁶ https://cea.nic.in/wp-content/uploads/2021/03/User_Guide_Version_20.0.pdf

- Meter calibration details
- Single-line diagram of the sites
- Detailed Project report

Each component observed during the site visit was found to be consistent with the submitted evidence. The spatial extent of the project boundary includes industrial and commercial facilities utilizing the generated energy. Furthermore, it extends to the project power plant and all interconnected power plants within the same electricity system.

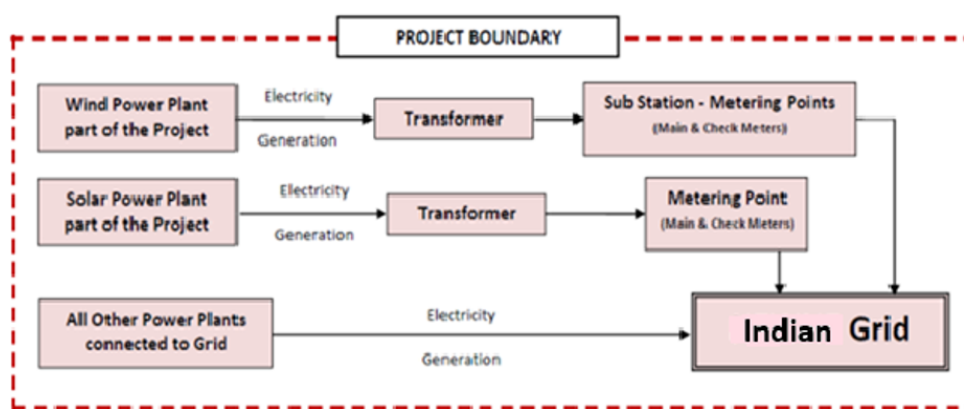


Figure - The project boundary of the project

Table 09: Emission sources included or excluded for methodology ACM0002 version 22 in the project boundary:

Source		Gas	Included?	Assessment and conclusion
Baseline	Grid-connected electricity generation	CO ₂	Yes	Major emission sources.
		CH ₄	No	Excluded for simplification. This is conservative
		N ₂ O	No	Excluded for simplification. This is conservative
Project	Greenfield Wind / Solar energy conversion system	CO ₂	No	The project activity does not emit any emissions.
		CH ₄	No	No methane generation is expected to be emitted.
		N ₂ O	No	No nitrous oxide generation is expected to be emitted.

3.4.4 Baseline Scenario

Baseline scenario is as per the tool 11 version 3.0.1 “Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period”/10/

Step 1: Validity of the Current Baseline

- **Step 1.1: Compliance with National and Sectoral Policies**
 - No new relevant national or sectoral policies affect the project.
 - The project remains voluntary, with no claims under other mechanisms like REC or NDC targets.
 - As there are no policy-driven changes, the current baseline remains valid.
- **Step 1.2: Impact of Circumstances**
 - The project activity replaces grid electricity with renewable energy.
 - Without the project, electricity would have been sourced from grid-connected power plants.
 - Since the project continues to replace grid electricity, the previous baseline remains valid.
- **Step 1.3: Continuation of Current Baseline Equipment or Investment**
 - The project is a greenfield renewable energy project with no baseline equipment or investment to assess.
 - Thus, this step is not applicable.
- **Step 1.4: Validity of Data and Parameters**
 - Emission factors and calculations have been updated using the latest available database (CEA Version 20.0)/11/.
 - The methodology remains consistent with CDM principles.

Step 2: Updating the Baseline and Parameters

- Since the baseline remains unchanged, only the emission factor calculation approach has been updated.
- The latest emission factors align with CEA data and methodological requirements.

Baseline Scenario Prior to Project Implementation

- Before the project, the equivalent electricity supplied by the wind turbines would have been generated by fossil-fuel-based grid-connected power plants.
- The project activity contributes to reducing emissions by replacing this fossil-fuel electricity with renewable energy.
- The combined margin (CM) for emission factor calculations follows the "Tool to calculate the emission factor for an electricity system" (Version 7.0) using official CEA data.

In conclusion, the baseline scenario remains valid, and emission factor updates align with the latest methodologies, ensuring continued compliance for crediting period renewal.

Table 10: The combined margin of the INDIAN grid used for the project activity is as follows:

Parameter	Value	Nomenclature	Source
EF _{grid,CM,y}	0.8612 tCO ₂ /MWh	Combined margin CO ₂ emission factor for the project electricity system in year y	Calculated as the weighted average of the operating margin (0.75) & build margin (0.25) values, sourced from Baseline CO ₂ Emission Database, Version 20.0, December 2024 published by Central Electricity Authority (CEA) ⁷ , Government of India
EF _{grid,OM,y}	0.9643 tCO ₂ /MWh	Operating margin CO ₂ emission factor for the project electricity system in year y	Calculated as the last 3-year (2021-22, 2022-23 and 2023-24) generation-weighted average, sourced from Baseline CO ₂ Emission Database, Version 20.0 ⁸ , December 2024 published by Central Electricity Authority (CEA), Government of India

⁷ https://cea.nic.in/wp-content/uploads/2021/03/User_Guide_Version_20.0.pdf

⁸ https://cea.nic.in/wp-content/uploads/2021/03/User_Guide_Version_20.0.pdf

EF _{grid,BM,y}	0.5522 tCO ₂ /MWh	Build margin CO ₂ emission factor for the project electricity system in year y	Baseline CO ₂ Emission Database, Version 20.0 ⁹ , December 2024 published by Central Electricity Authority (CEA), Government of India
-------------------------	---------------------------------	---	---

Assessment team conclude that the above-mentioned baseline scenario is in line with the applied methodology ACM0002 version 22/7/ Same is also reflected in final Joint PD & MR/1/. Thus accepted. The combined margin emissions factor is calculated as follows:

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

Where:

EF_{grid,BM,y} = Build margin CO₂ emission factor in year y (t CO₂/MWh)

EF_{grid,OM,y} = Operating margin CO₂ emission factor in year y (t CO₂/MWh)

W_{OM} = Weighting of operating margin emissions factor (per cent)

W_{BM} = Weighting of build margin emissions factor (per cent)

According to “Tool to calculate the emission factor for an electricity system” the weights for OM and BM are 0.75 and 0.25 respectively.

Therefore, EF_{grid,CM,y} = 0.9643 *0.75 + 0.5522 *0.25

= 0.8612 tCO₂/MWh

3.4.5 Additionality

The project is seeking a renewal of the crediting period; therefore, this section is not required. Additionality was assessed during the project's validation, as stated in Section 2.5 of the registered PD available on project webpage, and was cross-checked by the validation & verification team during the assessment. As per Section 3.9 and Subsection 3.9.8 (Renewal of Project Crediting Period, point 1) of the VCS Standard Version 4.7, dated 16-April-2024 /13/ , a full reassessment of additionality is not required when renewing the project crediting period unless otherwise specified in the methodology.'

3.4.6 Quantification of GHG Emission Reductions and Carbon Dioxide Removals

⁹ https://cea.nic.in/wp-content/uploads/2021/03/User_Guide_Version_20.0.pdf

VVB has checked the baseline, project and leakage calculation and confirm that the evaluation of baseline, project and leakage is as per the approved methodology and formula used to calculate the same is correct. The detail analysis is as below:

Baseline Emissions:

The baseline emission calculation for the project activity is attributable to the CO₂ emission that could have been produced by the fossil fuel-based power plants in absence of the project activity. Therefore, the amount electricity supplied to the Indian grid is multiplied by the grid emission factor of Indian grid to calculate the baseline emissions reduced by the project activity.

As per ACM0002 /7/ baseline emissions are calculated as follows:

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

Where:

BE _y	Baseline emissions in year y (tCO ₂ / year)
EG _{PJ,y}	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh/ year)
EF _{grid,CM,y}	Combined margin CO ₂ emission factor for grid connected power generation in year y calculated using the latest version of the “Tool to calculate the emission factor for an electricity system” (tCO ₂ /MWh)

Calculation of EG_{PJ, y}

If the project activity is the installation of a Greenfield power plant, then:

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

Where,

EG _{PJ,y}	Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the CDM project activity in year y (MWh/yr)
EG _{facility,y}	Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)

Vintage-wise calculation	MAPL (Net Export MWh)	PWEPL (Net Export MWh)	SPLL (Net Export MWh)	SSUL (Net Export MWh)
Period				

01-March-2023 to 31-December-2023	8,884.85	12,811.00	1,485.18	6,792.26
01-January-2024 to 30-September-2024	6,089.55	6,960.96	2,276.12	6,711.44

Thus, EGPI, $y = 52,011.36$ MWh

Therefore,

$BE_y = 8,884.85 \text{ (MWh)} \times 0.8612 \text{ (tCO}_2\text{/MWh)} + 12,811.00 \text{ (MWh)} \times 0.8612 \text{ (tCO}_2\text{/MWh)} + 1,485.18 \text{ (MWh)} \times 0.8612 \text{ (tCO}_2\text{/MWh)} + 6,792.26 \text{ (MWh)} \times 0.8612 \text{ (tCO}_2\text{/MWh)}$ (From 01-March-2023 to 31-December-2023) $+ 6,089.55 \text{ (MWh)} \times 0.8612 \text{ (tCO}_2\text{/MWh)} + 6,960.96 \text{ (MWh)} \times 0.8612 \text{ (tCO}_2\text{/MWh)} + 2,276.12 \text{ (MWh)} \times 0.8612 \text{ (tCO}_2\text{/MWh)} + 6,711.44 \text{ (MWh)} \times 0.8612 \text{ (tCO}_2\text{/MWh)}$ (From 01-January-2024 to 30-September-2024)

$BE_y = 7,651 \text{ tCO}_2\text{e (Round down)} + 11,032 \text{ tCO}_2\text{e (Round down)} + 1,279 \text{ tCO}_2\text{e (Round down)} + 5,849 \text{ tCO}_2\text{e (Round down)}$ (From 01-March-2023 to 31-December-2023) $+ 5,244 \text{ tCO}_2\text{e (Round down)} + 5,994 \text{ tCO}_2\text{e (Round down)} + 1,960 \text{ tCO}_2\text{e (Round down)} + 5,779 \text{ tCO}_2\text{e (Round down)}$ (From 01-January-2024 to 30-September-2024)

$BE_y = 25,811 \text{ (Round down)} + 18,977 \text{ (Round down)}$

$BE_y = 44,788 \text{ tCO}_2\text{e}$ (Vintage wise rounded down value)

Project Emission:

Not applicable since emissions from the project activity is zero as per methodology ACM0002: Grid-connected electricity generation from renewable sources Version 22.0. Hence,

$PE_y = 0$

Leakage Emission:

Not applicable since leakage emissions from the project activity is zero as per methodology ACM0002: Grid-connected electricity generation from renewable sources Version 22.0. Hence,

$LE_y = 0$

The formula used to calculate the net emission reduction for the project activity is:

$ER_y = BE_y - PE_y - LE_y$

Where

ER _y	Emission Reduction in tCO ₂ e/year
BE _y	Baseline emission in tCO ₂ e/year
PE _y	Project emissions in tCO ₂ e/year
LE _y	Leakage Emissions in tCO ₂ e/year

For the project activity during the current monitoring period

$$BE_y = 44,788 \text{ tCO}_2\text{e}$$

$$PE_y = 0 \text{ tCO}_2\text{e}$$

$$LE_y = 0 \text{ tCO}_2\text{e}$$

Therefore, **ER_y is 44,788 tCO₂e.**

The Assessment team verified the values mentioned in Joint PD and MR along with the ER sheet /2//3/ and all the supporting documents- JMR/Credit notes, Invoices/20/, calibration of meters /23/generation details/22/ were also verified for the net electricity generated from all the project activity.

3.4.7 Methodology Deviations

There has been no methodology deviation applied during this monitoring period of the project activity.

3.4.8 Monitoring Plan

The project activity applies the monitoring methodology ACM0002: Grid-connected electricity generation from renewable sources Version 22.0 /7/. The monitoring plan is in accordance with the monitoring methodologies. The monitoring plan will give opportunity for real measurements of achieved emission reductions and contains principles and concepts on which it is based, operational and monitoring obligations of the project owner like resources involved in the monitoring process, training, support activities, calibration and data collection, quality assurance procedures, data management, electronic support tools.

The monitoring procedure sets guidelines for the project investor to monitor the parameters regularly and to ensure quality and accuracy in monitoring. It elaborates on the functions of the monitoring team and procedures to be followed in monitoring of the VCS parameters.

The VVB has checked the monitoring plan of the Joint-PD&MR/1/ against the applied methodology. The monitoring plan in the Joint-PD&MR /1/ has been designed to comply with the latest applicable version of the methodologies and all the applied tools.

The project investor has a well-defined management structure for monitoring the project activity.

- a. PP VCS Coordinator: Overall project monitoring including collecting and aggregating JMRs/Invoices for all WTG/solar investors.
- b. Manager: Holds complete control over monitoring aspects pertaining to the project
- c. Site In-charge: Recording, Verification and Storage of data.
- d. Site In-charge/O&M Service provider: Operation and Maintenance, storage of data and data recording.

Data Recording and Trainings

The project personnel, including those involved in data recording, maintenance and direct data assessments in both states will be provided with training on the application and usage of the manual. O&M operator provides training to the on-site staffs on operation and maintenance of the metering system and adherence to the Monitoring Plan of the project activity. Training for operation of both Wind and Solar projects shall be provided by the respective O&M Operators.

For WTGs, Training on the machine is an essential pre-requisite, to ensure necessary safety of man and machine. Further, in order to maximize the output from the WTGs, it is extremely essential, that the engineers and technicians understand the machines and keep them in good health. In order to ensure that technology providers' service staff is deft at handling technical snags on top of the turbine, the necessity of ensuring that they are capable of climbing the tower with absolute ease and comfort has been established.

For the purpose of energy accounting, O&M operator will provide ABT compliant meters at the interface points. Interface metering will confirm to the Central Electricity Authority (Installation and Operation Meters) Regulation, 2006. In the event that the main meter is not in service as a result of maintenance, repairs or testing, then the check meter will be used during the period the main meter is not in service. Calibration of all the meters will be undertaken at least once in 3 years and faulty meters will be duly replaced immediately. Calibration will be done by an authorized agency or reputed laboratory.

Apportioning Procedure for Solar Power project:

As individual main & check meter are installed for each Solar Plant, hence no apportioning is required for Solar Projects.

Apportioning Procedure for Wind Power project:

The net electricity supplied to the grid would be reported as the difference between the net export and import from the WTG. The electricity export and import data is monitored via main and check meters connected to feeders at the respective sub-station.

In case of INDIAN Grid, multiple WTGs would be connected to the feeder, one of which would be part of the project activity and rest of which would not be part of the project activity (WTGs owned

by other entities). The import and export of electricity is continuously monitored by the export/import meter and the data is recorded on a monthly basis jointly by the proponent and the electricity board. The meter is located at the delivery point of wind power in the grid. This accounts for the import of electricity that is used by the Project proponent. Hence the net electricity generated is calculated from the joint meter reading and recorded /archived in paper/electronic.

SEB/O&M Contractor follows an apportioning procedure to account for electricity generation from individual WTGs based on data from individual WTG controllers.

Following the joint meter readings, apportioning of net electricity supplied to grid by each WTG is done by the SEB/O&M Contractor based on the individual meter readings recorded from the controller panel meter of each WTG and based on the meter reading recorded from the meters situated at the connected substations.

In case of Maharashtra only, based on the monthly export and import data as per main/check meters and the WTG controller readings, SEB provides a break-up of the electricity exported and imported for each WTG.

Rajasthan

A monthly joint meter reading of the energy meters is taken by State Electricity Board officials and O&M contractors (representatives of the project investor). Apportioning of net electricity generation from each WTG connected to INDIAN Grid is then determined as follows:

1	Apportioning Ratio	Generation at WTG Controller ÷ Total Generation of all WTG Controller for the feeder
2	Electricity export to the grid by WTG (EG_{export})	Export from Main/Check Meter * Apportioning Ratio
3	Electricity Import from the grid by WTG (EG_{import})	Import from Main/Check Meter * Apportioning Ratio
4	Net electricity generated by WTG	Electricity Export to the grid by WTG – Electricity Import from the grid by WTG

Above steps for calculation of EG_{export} and EG_{import} are carried out by O&M Contractor & energy break-up sheet is issued by the O&M Contractor which is certified by the representatives of SEB Officials. Based on the break-up sheets Project investor raises invoice to DISCOM which forms the cross-check for the net electricity generated. The Project investor has no role in the entire procedure of apportioning.

Maharashtra

A monthly joint meter reading of the energy meters is taken by MSSEDCL officials and O&M contractors (representatives of the project investor). Apportioning of net electricity generation from each WTG connected to INDIAN Grid is then determined as follows:

1	Apportioning Ratio	$\frac{\text{Generation at WTG Controller}}{\text{Total Generation of all WTG Controller for the feeder}}$
2	Electricity Import from WTG by the grid (EG_{import})	Import from Main/Check Meter * Apportioning Ratio
3	Electricity Export to the WTGs by the grid (EG_{export})	Export from Main/Check Meter * Apportioning Ratio
4	Net electricity generated by WTG	Electricity Import from WTG by the grid – Electricity Export to the WTGs by the grid

Above steps for calculation of EG_{import} and EG_{export} are carried out by MSEDCL Officials & energy break-up sheet is issued by the MSEDCL Officials. Based on the break-up sheets Project investor raises invoice to DISCOM which forms the cross-check for the net electricity generated. The Project investor has no role in the entire procedure of apportioning.

Table 11: Following are the Meters details in the project activity:

For Manifold Agricrops Pvt. Ltd.

Meter Details	Main Meter	Check Meter
Installed at	GSS Akal	GSS Akal
Meter Serial No	RJB 78210	RJB 78212
Meter Make	Secure	Secure
Model	R3M021-436	R3M021-436
Accuracy Class	0.2 s	0.2 s
Date of Calibration	14-March-2023	14-March-2023
Due Date of Calibration	13-March-2026	13-March-2026

For Parmarth Wind Energy Pvt. Ltd.

Meter Details	Main Meter	Check Meter
Installed at	Bambawade S/Stn	Bambawade S/Stn
Meter Serial No	13769361	16595547

	23006356 ¹⁰	23006353
Meter Make	Elster	Elster
Model	Alpha A 1800	Alpha A 1800
Accuracy Class	0.2 s	0.2 s
Date of Calibration	07-March-2021	07-March-2021
	06-March-2024	06-March-2024
Due Date of Calibration	05-March-2027	05-March-2027

For Sidhidata Power LLP

Meter Details	Main Meter	Check Meter
Installed at	Shedyal S/Stn	Shedyal S/Stn
Meter Serial No	HT01131245 (Feeder No. 5)	HT01131246 (Feeder No. 5)
	Q0723119 ¹¹ (Feeder No. 5)	Q0833064 (Feeder No. 5)
Meter Make	EDMI	EDMI
Accuracy Class	0.2 s	0.2 s
Date of calibration	06-November-2020	06-November-2020
Due Date of Calibration	05-November-2023 ¹²	05-November-2023

For Sidhidata Solar Urja Ltd.

Meter Details	Main Meter	Check Meter
Installed at	SPD Site (Plant)	SPD Site (Plant)
Meter Serial No	13194928	13194929

¹⁰ The main and check meters (13769361 and 16595547) was replaced on 01-October-2024 with the new main and check meters (23006356 and 23006353). However, the replacement did not occur in the current monitoring period i.e., from 31-March-2023 to 30-September-2024. Therefore, it has no impact on the emission reduction and the calibration is not required.

¹¹ The main and check meters (HT01131245 and HT01131246) was replaced on 01-September-2023 by main and check meters (Q0723119 and Q0833064) and as the meters are not calibrated in the specified frequency. Therefore, PP has applied the maximum permissible error factor (0.2%) for the delayed period during the monitoring period from 01-September-2023 to 30-September-2024.

¹² The previous meter calibration was valid until 05-November-2023. However, due to certain circumstances, the old meters were replaced with new ones on 01-September-2023.

Meter Make	Larsen & Toubro	Larsen & Toubro
Model	ER300P	ER300P
Accuracy Class	0.2 s	0.2 s
Date of Calibration	20-July-2020	20-July-2020
	19-July-2023	19-July-2023
Due Date of Calibration	18-July-2026	18-July-2026

Assessment Conclusion- Based on the site visit and interviews with the site personnel and the PP representative, the assessment team confirms that the monitoring parameters have been accurately described in the updated PD and MR. The parameters comply with the methodology ACM0002. Version 22.0/7/, as well as the guidance provided by VCS Standard Version 4.7 /13/ and the VCS Program Guide Version 4.4./12/ Supporting documents like- Commissioning certificate/24/, SLD/26/, generation Data/22/, and Training details/32/ were also reviewed to verify the entire monitoring plan. The assessment team confirms that all data sources and assumptions are appropriate, the methodology and referenced tools have been correctly applied, and the calculations are accurate and relevant to the project activity. This results in a conservative estimate of the emission reductions.

3.5 Non-Permanence Risk Analysis

There is no non-permanence risk rating determined by the project proponent as this is not an AFLOU project, hence not applicable.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

The project activity was started on 31-March-2013 which is the earliest commissioning date amongst all the individual projects which are part of the project activity. All sites included in the joint PD&MR and the relevant dates of the project implementation for each site are presented during audit. The project has multiple locations but it is not a grouped project. The Project is owned by LNB Renewable Energy Private Limited, which is the project participant of the Project.

The assessment team during this Joint validation & verification process:

- Checked the location of project and geo-coordinates were verified during site inspection/36/;
- Reviewed documents mentioned in section 2.2 of this report to confirm the Project has been operated as per the joint PD & MR.
- Interviewed relevant personnel for the project implementation information, and assessed the implementation status

Implementation Status	Assessment steps, evidence checked, & conclusion:
Project implementation	The project activity involves the installation and generation of electricity using renewable energy resources i.e., by using solar power (renewable sources) to replace electricity supply from fossil-fuel-dominated electricity, thus leading to reductions of anthropogenic GHG emissions from the atmosphere. The operational lifetime of project activity is 25 years for solar and 20 years for wind/34/. Assessment Steps: • Desk review • Onsite visit and conduct interview • Cross check of the supporting documents • Check baseline calculation and ex-ante values with the help of applied methodology and tools Evidence checked: All evidences are mentioned in joint PD & MR/1/, site inspection/39/ and interviews with site personnel and local stakeholders/38/. Assessment Conclusion: The project implemented is a solar and wind project applies approved methodology ACM0002: Grid-connected electricity generation from renewable sources version 22.0/7/. The Assessment team based on the above activities concludes that- • The implementation status and equipment installation of the project activity align with the joint PD & MR /1/.

	• The actual operation of the VCS project activity is conducted by the project proponent in accordance with the joint PD & MR /1/. • The information, including data and variables, provided in the joint PD & MR /1/ is consistent with the details stated in the same document.
Monitoring plan	The PP is operating the project in accordance with the joint PD & MR /1/. A monitoring organization has been established, and all monitoring staff have undergone training to ensure the proper functioning of the project activity and the proper monitoring of emission reductions. Evidence checked: The assessment team reviewed and verified the training records/31/ and net metering details. Assessment Conclusion: VKU has reviewed the provided documentation and verified that the project proponent is managing and operating the project as per the monitoring plan. The assessment team conducted onsite interviews/38/ with project representatives regarding actual monitoring activities, directly observed the monitoring process, and examined documented evidence. The findings confirm that the project proponent has executed monitoring activities in compliance with the monitoring plan outlined in the joint PD & MR. Additionally, the audit team verified parameters within the Joint PD & MR /1/ and the Emission Reductions Calculation Spreadsheet /2/3/, finding them consistent with supporting evidence such as generation details/22/. Hence, assessment team concludes that: • The project proponent has implemented the monitoring plan as per the project description, with complete monitoring activities and a well-established system for obtaining, recording, compiling, and analysing monitored data and parameters. • There is no material misstatement between the actual monitoring system and the monitoring plan outlined in the project description and applied methodology.

AFOLU-specific project implementation

Since this is not an AFOLU project hence this section is not applicable

4.2 Accuracy of Reduction and Removal Calculations

The project monitoring has been carried in accordance with the Joint PD and MR/1/. It involves a single parameter to be monitored $EG_{PJ,y}$ (Quantity of net electricity generation supplied by the project (Wind or Solar) plant/unit to the grid in year y) according to the monitoring plan and Joint PD & MR/1/. The parameter $EG_{PJ,y}$ value is sourced from Monthly electricity share certificates/note or Credit Note or Joint Meter Reading Report/20/. Properly calibrated meters of 0.2s accuracy class are installed at the substation and regularly monitor the import and export value through the SEB energy meter (main meter & check meter). ER sheet/2//3/ prepared by PP has been reviewed by assessment team thoroughly by cross checking the values of SEB and generation details submitted by PP and found correct including all the formulae and conversions and aggregations.

The monitoring plan laid in the Joint PD and MR/1/ is being followed at the site. The assessment team has verified the information flow (from data generation, and aggregation, to recording, calculation, and reporting for these parameters including the values). The emission reductions are based on the net electricity generated and exported from the project. PP has provided sufficient data for the current monitoring period. The values of the parameter net electricity generation supplied to the grid by each phase used in deriving the GHG emission reduction could be very well correlated between the data sets and Actual ER spreadsheet/3/ provided by PP. The verification of each monitoring parameter has been discussed in later sections of this report. The calculation method and formulae used in calculating baseline emission complies with the methodology used i.e., ACM0002: Grid-connected electricity generation from renewable sources Version 22.0/7/. The appropriateness of default values used in the Joint PD & MR is elaborated in sections 3.4.4 and 3.4.6 of this report.

The estimated emission reduction for the current monitoring period is 44,706 tCO₂e however the achieved emission reductions are 44,788 tCO₂e (round down value).

In section 5.4 of Joint PD and MR/1/ calculations for estimated emission reductions and carbon dioxide removals have been stated. This is further cross-checked as compiled in ER Sheet/2//3/ which has been verified by the assessment team from SEB and generation details/22/. The monitoring & measurement of electricity at the project metering point is being done continuously; while recording is being done every month as Joint Meter Reading by the representatives of State Utility & PP.

PP has submitted all the evidence like SEB, and generation details /22/ to the VKU Assessment Team for verification and assessment of ER Sheet/2//3/.

Hence Assessment team can state that the calculation method and formulae used in calculating baseline emission follow the methodology used i.e., ACM0002: Grid-connected electricity

generation from renewable sources Version 22.0” /7/ furthermore in conformance with section 3.15, clause 3.15.1//3.15.2//3.15.3//3.15.4 of VCS Standard version 4.7/13/.

4.3 Quality of Evidence to Determine Reductions and Removals

During the verification process, the verification team thoroughly examined all relevant documents provided by the PP to assess the accuracy and quality of the data submitted. These data are crucial in determining the emission reductions achieved by the project.

The verification team reviewed the records required for monitoring, ensuring that they were archived by the listed monitoring plan. The purpose of this review was to confirm that the project had followed the prescribed procedures for data collection, storage, and reporting. No significant issues, lack of evidence, or missing data were identified during the verification process. This indicates that the project's monitoring system is effective in ensuring the quality of the monitored data. The verification team also confirmed that the project had implemented appropriate quality assurance and quality control measures for its internal data.

By conducting a comprehensive review of the relevant documents and data, the verification team ensures the integrity and accuracy of the project's monitoring system, providing confidence in the reported emission reductions.

The only parameter in the project activity is “**EG_{PJ,y}** (Quantity of net electricity generation supplied by the project (Solar & wind) plant/unit to the grid in year y) (**MWh**)”.

The table below describes how the parameter “**EG_{PJ,y}** (Quantity of net electricity generation supplied by the project (Solar & wind) plant/unit to the grid in year y) (**MWh**)”, that is to be measured according to the monitoring plan, has been verified to confirm that the actual monitoring complies with the monitoring plan, monitoring data has been thoroughly assessed and that the calibration requirements are met:

Table No: 12 Assessment of Parameter EG_{PJ,y} (Quantity of net electricity generation supplied by the project (Solar & wind) plant/unit to the grid in year y) (MWh), that is to be measured:-

Parameter	EG _{PJ,y} (Quantity of net electricity generation supplied by the project (Wind or Solar) plant/unit to the grid in year y)	
Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	Continuous monitoring The quantity of net electricity generation supplied by the solar power plant to the grid is measured

		in megawatt-hours (MWh). The calculation of net electricity supplied to the grid is based on the measured values of "export" and "import" of electricity, which are obtained through the dedicated SEB (State Electricity Board)- SLDC Gujarat. Net electricity supplied to the grid by the project activity is cross-checked cross checked from the invoice raised to DISCOM. Monthly meter readings are taken from the main and check meter installed at the substation and certified by the representatives of SEB Officials and the representatives of the project proponent.
	Is measuring and reporting frequency in accordance with the monitoring plan and monitoring methodology? (Yes / No)	Yes. The reporting frequency is in line with the monitoring plan as outlined in section 6.2 of Joint PD and MR /1/ and monitoring methodology/8/. There is no deviation from the stated procedures or adopted methodology i.e., ACM0002 Version 22.0/7/
	Monitoring equipment	Electricity Meters (EMs) of 0.2s accuracy class are used to monitor the electricity to the grid specifically the values of export” and “import” of electricity through the dedicated SEB energy meter installed. No monitoring equipment is used to determine Quantity of net electricity generation supplied by the project

		(Solar & wind) plant/unit to the grid in year y $EG_{pj,y}$ (MWh) as it is calculate value of the export to grid and import from grid . However, the export and import values are calculated using measured values, which are continuously measured, and recorded monthly used for measuring the electricity export to the grid and electricity import from the grid. The details of meters and calibration details are provided in Annexure 2 of Joint PD and MR/01/ and in this report.
	Is accuracy of the monitoring equipment as stated in the monitoring plan? If the monitoring plan does not specify the accuracy of the monitoring equipment, does the accuracy of the monitoring equipment comply with local/national standards, or as per the manufacturer's specification?	Yes, the accuracy of the monitoring equipment used to measure the input values such as import and export to calculate net electricity generation value is Electricity Meters (EMs) of 0.2s accuracy class which is stated in appendix 2 of Joint PD and MR/1/. Also, the same was verified from the energy meters installed at the site during the on-site visit.
	Is the accuracy valid for the entire measuring range or do different accuracy levels apply to different measuring ranges?	Yes, the accuracy of monitoring equipment as specified in net metering details/23/ is valid for the entire range.
	Calibration frequency /interval:	The calibration frequency of the meters used for the monitoring of export, and import shall be once

		every three years as per section 6 of Joint PD and MR. The assessment team confirmed the frequency while interviewing /38/ the site personnel during site visit.
	Is the calibration interval in line with the monitoring plan and/or methodology? If the monitoring plan does not specify the frequency of calibration, is the selected frequency in accordance with the local/national standards, or as per the manufacturer's specifications?	Yes, the calibration frequency of the meters used in the project activity is in accordance with the requirements specified in Joint PD and MR section 6.2. All interface meters, including those used in the project activity, are required to be tested at least once every three years. By following the calibration frequency as stipulated in the regulations and guidelines, the project ensures that the accuracy and reliability of the meter readings are maintained, which is essential for accurately monitoring the electricity generation and associated emission reductions
	Is the calibration of measuring equipment carried out by an accredited person or institution?	Yes, All the energy meters are under the control of state utility and calibration/testing of energy meters is also under the jurisdiction of state utility.
	Is(are) calibration(s) valid for the whole reporting period?	Yes, calibration is which is cross verified through calibration certificates/23/.
	How were the values in the monitoring report verified?	Cumulative value of Quantity of net electricity generation supplied by the project (Solar) plant/unit to

		the grid in year y $EG_{pj,y}$ (MWh) for entire monitoring period is reported in the Joint PD and MR/1/, and monthly values in the ER calculation sheet/2/3/. The monthly values were verified by VKU's assessment team from the SEA/20/, and generation details and found to be consistent. The value of this parameter for the current monitoring period was verified as 52,011 MWh. The same is outlined in the ER Sheet /2//3/submitted by the PP, which was verified by VKU from the SEA issued to the PP by the State utility. and generation details/22/
	Does the data management ensure correct transfer of data and reporting of emission reductions and are necessary QA/QC processes in place?	The assessment team verified that- Net electricity supplied to the grid by the project activity is cross-checked with the monthly State Energy Account document to each of the project participants. The values are noted down by the project team member which is then verified by the Project head. According to Central Electricity Authority (Installation and Operation of meters) Regulations 2019, all the electricity meters (interface & consumer meters) shall be tested at least once in five years and recalibrated if required.

		Hence, all the meters that are part of this project activity will be tested at least once in 3 years and recalibrated, if required.
Conclusion	The parameter has been monitored appropriately, in accordance with the monitoring plan (as per measurement methods and procedures to be applied) and applied methodology. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. The emission reduction calculation for the project activity is estimated based on the electricity supplied by the Project activity. Since 100% data was verified, the team can ascertain that the values adopted for emission reduction calculation are free from material errors.	

Calibration of meters /33/

During the verification assessment of the project activity, accuracy of all the metering equipment's has been checked and found appropriate. The installation and working conditions of the meters were checked during the site inspection/41/ and were found to be satisfactory by VKU. Details of meters are provided in section 3.4.8 of this report.

Assessment on calibration:

The energy meter test report/23/were checked by the assessment team concerning their calibration validity, accredited entity, accuracy class, make and calibration date and found that the calibration details provided are correct.

GHG Calculations:

The calculation of emission reduction has been done in accordance with the applied methodology used i.e., ACM0002: Grid-connected electricity generation from renewable sources Version 22.0/7/. As per the applied methodology, the values of project emission and leakages are considered as zero for the project activity. Emission reduction calculation has been mentioned in 3.4.6 of this report.

The verification team confirms that appropriate methods and formulae for calculating baseline emissions have been followed aligning with section 3.15 of VCS standard version 4.7 /13/ The assumptions, emission factors and default values that were applied in the calculations are justified by clause 3.15.4 of VCS standard version 4.7/13/.

The estimated emission reduction to be achieved from the project activity for the current monitoring period is 44,706 tCO₂e, whereas actual emission reductions achieved are 44,788 tCO₂e.

The assumptions, emission factors, and default values that were applied in the calculations are justified. The actual emission reduction achieved is 0.18% higher than the estimated figure to match the monitoring period.

5 VALIDATION AND VERIFICATION OPINION

5.1 Validation and Verification Summary

VKU Certification Pvt. Ltd. (hereafter referred to as "VKU") has been engaged by Infinite Environmental Solutions Limited to conduct the validation and verification of the project activity "Renewable Energy Project by LNB Group" (hereafter referred to as "the project"). The requirements of VCS version 4.7, the VCS Validation and Verification Manual, and the approved Clean Development Mechanism (CDM) methodology ACM0002: Grid-connected electricity generation from renewable sources Version 22.0, as well as other relevant criteria ensuring consistency in project operations, monitoring, and reporting has been followed.

The scope of validation and verification includes an independent and objective assessment of the joint PD & MR, the project's baseline study and monitoring plan, the emission reduction calculation spreadsheet, and other relevant documents in compliance with VCS requirements. The GHG statement remains the responsibility of the project proponent. This Joint Validation and Verification Report summarizes the findings of the validation and verification process.

5.2 Validation Conclusion

The validation process is an independent third-party assessment of the project's baseline, estimated GHG emission reductions or net anthropogenic GHG removals, monitoring plan, and crediting period, by the applicable VCS requirements. Validation is a mandatory step for all VCS projects and serves to assure stakeholders of the project's quality and its potential to generate Verified Carbon Units (VCUs).

The project falls under the non-AFOLU category and adheres to validation criteria outlined in VCS guidance documents and the selected CDM methodology and tools, including:

- VCS Standard, version 4.7/13/
- VCS Program Guide, version 4.4/12/
- Methodology ACM0002: Grid-connected electricity generation from renewable sources Version 22.0/7/
- Tool 01: Tool for the demonstration and assessment of additionality v07.0.0/8/

- Tool 07: Tool to calculate the emission factor for an electricity system v07.0/9/
- Tool 11: Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period v3.0.1/11/
- VCS Joint PD & MR Template, version 4.4/6/

The project is implemented in different districts of state Maharashtra and Rajasthan in India and is designed to generate electricity by solar panels and Wind turbine generators. The project has been installed total capacity of 27.20 MW leading to be estimated approximately emission reductions of 29,669 tCO₂e per year over the second crediting period.

Crediting Period: From 31-March-2023 to 30-March-2033 (Renewable crediting period)

Validated estimated GHG emission reductions and carbon dioxide removals for the project crediting period:

Vintage period	Estimated baseline emissions (tCO ₂ e)	Estimated project emissions (tCO ₂ e)	Estimated leakage emissions (tCO ₂ e)	Estimated reduction VCU (tCO ₂ e)	Estimated removal VCU (tCO ₂ e)	Estimated total VCUs (tCO ₂ e)
31-March-2023 to 31-December-2023	22,445	0	0	22,445	0	22,445
01-January-2024 to 31-December-2024	29,871	0	0	29,871	0	29,871
01-January-2025 to 31-December-2025	29,816	0	0	29,816	0	29,816
01-January-2026 to 31-December-2026	29,762	0	0	29,762	0	29,762
01-January-2027 to 31-December-2027	29,708	0	0	29,708	0	29,708
01-January-2028 to 31-December-2028	29,654	0	0	29,654	0	29,654
01-January-2029 to 31-December-2029	29,601	0	0	29,601	0	29,601

01-January-2030 to 31-December-2030	29,548	0	0	29,548	0	29,548
01-January-2031 to 31-December-2031	29,495	0	0	29,495	0	29,495
01-January-2032 to 31-December-2032	29,443	0	0	29,443	0	29,443
01-January-2033 to 30-March-2033	7,348	0	0	7,348	0	7,348
Total	2,96,691	0	0	2,96,691	0	2,96,691

5.3 Verification conclusion

VKU's verification approach is based on the understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these. VKU Certification planned and performed the verification by obtaining evidence and other information and explanations that VKU Certification considered necessary to give **"Reasonable level of assurance"** that reported GHG emission reductions are fairly stated.

Table No 13: Opinion/Conclusion by Validation-Verification Body

Opinion	Final Documents	Monitoring Period	Emission Reductions achieved	Remarks
Positive opinion ☒ Negative Opinion ☐ Adverse Opinion ☐ Unmodified Opinion ☒ Modified Opinion ☐	Joint PD and MR Version 04 dated 26-March-2025 Emission Reduction Sheets Version 03 dated 18-March-2025	31-March-2023 to 30-September-2024 (Inclusive of both days)	44,788 tCO ₂ e	The GHG emission reductions are calculated on the basis of approved methodology, ACM0002: Grid-connected electricity

				generation from renewable sources Version 22.0/7/ and the monitoring plan included in the Joint PD and MR/1/
Hence VKU can certify that the emission reduction from the project during the current monitoring period 31-March-2023 to 30-September-2024 (Inclusive of both days) amounts to 44,788 tCO₂e assessed in line with the applicable VCS requirements set out in section 3.15 of VCS standard version 4.7/13/ The VVB hereby issues a resolutely positive and unmodified opinion meticulously drafted in strict accordance with ISO 14064-3:2019, /43/ Section 09, and the precise provisions of Clause 9.7.1.6 & 9.7.2 of ISO 14065:2020. /44/ This opinion stands in full alignment with the exacting requirements delineated in ISO/IEC 17029:2019, Section 9.7./45/ Our verification process provides a robust and reasonable level of assurance regarding the veracity of the reported GHG emission reduction data. This data is devoid of any material misstatements and is steadfastly supported by the evidence furnished by the Project Proponent (PP).				

Verification Period: From 31-March-2023 to 30-September-2024 (Inclusive of both days)

Verified GHG emission reductions and carbon dioxide removals in the above verification period:

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Reduction VCU (tCO ₂ e)	Removal VCU (tCO ₂ e)	Total VCUs (tCO ₂ e)
31-March-2023 to 31-December-2023	25,811	0	0	25,811	0	25,811
01-January-2024 to 30-September-2024	18,977	0	0	18,977	0	18,977
Total	44,788	0	0	44,788	0	44,788

5.4 Ex-ante vs Ex-post ERR Comparison

Vintage period	Ex-ante estimated reductions/removals	Achieved reductions/removals	Percent difference	Explanation for the difference
31-March-2023 to 31-December-2023	22,434	25,812	15.05%	It is to be noted here that as per the estimated emission reduction to be achieved from the project activity for the current monitoring period is 44,706 tCO ₂ e, whereas actual emission reductions achieved are 44,788 tCO ₂ e, which is approximately 0.18% higher than the estimated emission reductions. The higher generation during the current verification period is due to certain natural conditions as this monitoring period includes all the seasons i.e. rainy, winter and summer which are favorable time in terms of wind and solar energy.
01-January-2024 to 30-September-2024	22,272	18,981	-14.79%	
Total	44,706	44,788	0.18%	

APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

There is no Commercially sensitive information involved hence this section is not applicable.

APPENDIX 2: ABBREVIATIONS

Abbreviations	Full texts
BE	Baseline Emissions
BEF	Baseline Emission Factor
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM M&P	Modalities and Procedures CDM
CL	Clarification Request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DNA	Designated National Authority
EB	Executive Board
EF	Emission Factor
ER	Emission Reductions
NA	Not Applicable
OSV	On Site Visit
PD	Project Description
PP	Project Proponent
QA/QC	Quality Assurance /Quality Check
Ref.	Document Reference
SS(s)	Sectoral Scope(s)
TA(s)	Technical Area(s)
UNFCCC	United Nations Framework Convention on Climate Change
VCU	Verified Carbon Unit
VCS	Verified Carbon Standard
VKU	VKU Certification Ltd.
VVS	Validation and Verification Standard
VVB	Validation and verification body
KV	kilovolts
KW	Kilowatt
MR	Monitoring Report
MW	Megawatt
PPA	Power Purchase Agreement

APPENDIX 3: AUDIT FINDINGS

Total Findings Raised: - 09

CAR- 05

CL- 04

FAR- 00

Finding No. 01		Date: 18-02-2025
Finding Type- CAR ☒ CL ☐ FAR ☐		
Stage of finding raised : Desk Review ☒ On-site/remote/hybrid assessment ☐ Technical Review ☐ Project Review Report by Registry ☐		
Requirement VCS Joint PD and MR template V 4.4 VCS Standard V 4.7		
Non-Conformity 1. The format for writing the file name is not followed as per the template guideline: "VCS PDMR Project ID DDMMYYYY-DDMMYYYY". 2. The font size and colour are not followed as per the mentioned font colour and size in the VCS template throughout Joint PD and MR. 3. PP has not followed the template for VCS joint PD and MR V 4.4 for explaining the section where not applicable instead of only writing Not applicable.		
Evidence 1. VCS Joint PD & MR (File name)- Joint PDMR_VCS1418. 2. VCS Joint PD & MR section 1.12 3. VCS Joint PD & MR section 1.4.3		
1st Response from PP		Date: 10/03/2025
1. The format for file name has been revised as per the guidelines for File name mentioned on page 1 of the VCS Joint PDMR Template V 4.4. 2. The font size and colour of all sections have been revised throughout the updated joint PDMR, in accordance with the VCS Joint PDMR Template V 4.4. 3. The section 1.4.3 has been revised, justified, and updated as per the VCS Joint PDMR Template V 4.4.		
Documents provided by PP for review Revised Joint PDMR, version 02		
1st Review by Assessment Team		Date: 13-03-2025
1. Assessment team confirms that PP has updated the file name and now is consistent with VCS PD&MR v4.4. Hence, finding is closed. 2. PP has not corrected font colour in section 2 of the Joint PD & MR. Hence, finding is open. 3. PP has updated section 1.4.3 in revised Joint PD & MR hence, finding is closed.		
CAR#01 OPEN		

2nd Response from PP	Date: 18/03/2025
2. The font size and colour of all sections have been revised throughout the updated joint PDMR, in accordance with the VCS Joint PDMR Template V 4.4.	
Documents provided by PP for review	
Revised Joint PDMR	
2nd Review by Assessment Team	Date: 18-03-2025
Assessment team confirms that PP has updated revised PD & MR and corrected font colour in section. Hence, finding is closed. CAR#01 CLOSED	

Finding No. 02	Date: 18-02-2025
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised :	
Desk Review	☒
On-site/remote/hybrid assessment	☐
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
VCS Joint PD and MR template V 4.4	
VCS Standard V 4.7	
Non-Conformity	
1. PP has not correctly mentioned the year. 2. Page number is not correctly mentioned in the report. 3. Title is not correctly mentioned by PP. 4. VVB name is incorrectly mentioned by PP. 5. End date is not correctly mentioned by PP. 6. PP has not provided an accessible link.	
Evidence	
1. VCS Joint PD & MR -Title page 2. VCS Joint PD & MR- Content table 3. VCS Joint PD & MR- section 1.1 4. VCS Joint PD & MR- section 1.2 5. VCS Joint PD & MR- section 1.11 6. VCS Joint PD & MR- section 1.12- Footnote 6.	
1st Response from PP	Date: 10/03/2025
1. In the title page of the revised Joint PDMR, PP has corrected and revised the year. 2. The page numbers have been corrected and revised in the report. 3. In section 1.1 of the Joint PDMR, the title has been revised and corrected. 4. In section 1.2 of the Joint PDMR, PP has corrected and revised the name of VVB. 5. In section 1.11 of the PDMR, PP has revised the end date. 6. In section 1.12 of the revised Joint PDMR, the weblink in footnote 6 has been revised.	
Documents provided by PP for review	
Revised joint PDMR, version 02	

1st Review by Assessment Team	Date: 13-03-2025
1. Assessment team confirms that PP has corrected the year in title page of the revised Joint PD & MR. Hence, finding is closed. 2. PP has updated the page number in the revised Joint PD & MR and found correct. Hence, finding is closed. 3. Assessment team confirms that PP has corrected title in section 1.1 in the revised Joint PD & MR. Hence, finding is closed. 4. PP has corrected VVB name in section 1.2 (Audit history table) and found correct. Hence, finding is closed. 5. PP has corrected end date in the section 1.11 and found correct. Hence, finding is closed. 6. Assessment team confirms that link in footnote 6 in section 1.12 is now assessable hence, finding is closed. CAR#02 CLOSED	

Finding No. 03	Date: 18-02-2025
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised: Desk Review ☒ On-site/remote/hybrid assessment ☐ Technical Review ☐ Project Review Report by Registry ☐	
Requirement	
VCS Joint PD and MR template V 4.4 VCS Standard V 4.7	
Non-Conformity	
1. PP has not removed futuristic sentences throughout the document since the project is already commissioned and exporting electricity. 2. PP has not followed VCS Joint PD & MR template v4.4 as Project's SD contributions has not been included in the appendix of this report. 3. The SDG indicator description and the reported contributions do not align. 4. PP has not followed VCS joint PD and MR template V 4.4 as the Process used to identify stakeholders is not mentioned. 5. The details provided do not correspond with the objectives of this project activity.	
Evidence	
1. VCS Joint PD & MR section 1.1, 1.18.1 2. VCS Joint PD & MR section 1.18.2 3. VCS Joint PD & MR section 1.18.2 (Table 1- Sustainable development contributions) 4. VCS Joint PD & MR section 2.1.1 5. VCS Joint PD & MR section 2.1.1	
1st Response from PP	Date: 10/03/2025
1. As the project is already commissioned the futuristic sentences have been revised throughout the updated MR. 2. PP has added the projects SD Contributions in appendix 4 of the revised Joint PDMR version 02.	

3. The SDG indicator description and the reported contributions has been aligned and updated in the revised PDMR version 02.	
4. In section 2.1.1 of the revised PDMR, the process used to identify the stakeholders has been explained and updated in the revised PDMR as per VCS joint PD and MR template V 4.4.	
5. In section 2.1.1 of the revised joint PDMR, the sentence has been rephrased and been revised as per the project activity.	
Documents provided by PP for review	
Revised joint PDMR, version 02	
Supporting documents for SD Contributions	
1st Review by Assessment Team	Date: 13-03-2025
1. Assessment team confirms that PP has removed futuristic sentences from the report as the project is already fully commissioned and exporting electricity. Hence finding is closed. 2. PP has mentioned SD contributions by the project activity in Appendix 4 of the revised Joint PD & MR. Hence, finding is closed. 3. Assessment team confirms that PP has updated section 1.18.2 and is now the contributions are presented in alignment with SDG Target 7.2, which focuses on the "Renewable energy share in total final energy consumption.". Hence finding is closed. 4. Assessment team confirms that PP has updated and mentioned the process used to identify the stakeholders in section 2.2.1 of revised Joint PD & MR. Hence, finding is closed. 5. PP has corrected the details in section 2.2.1 of the revised Joint PD & MR and found correct. Hence, finding is closed.	
CAR#03 CLOSED	

Finding No. 04	Date: 18-02-2025
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised :	
Desk Review	☒
On-site/remote/hybrid assessment	☒
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
VCS Joint PD and MR template V 4.4	
VCS Standard V 4.7	
Non-Conformity	
1. PP has not followed Joint PD & MR template guide v4.4 for the section outcome of FPIC. 2. PP has mentioned an incorrect appendix number for the calibration details. 3. PP has not followed the template guideline v4.4 of Joint PD&MR as calculation method used to establish the data/parameter is not mentioned in this section. 4. The PP has not provided any information on the procedures for handling waste generated during the project or the policy for managing waste from solar modules. 5. The information mentioned is not correct as the assessment team has found during the onsite visit through interview that robotic cleaning is not being used for cleaning solar modules.	

6. The meter serial number is incorrect as per the onsite visit. If the meters have been replaced for any reason, PP has to update the meter details in the Joint PD & MR.	
Evidence	
1. VCS Joint PD & MR section 2.1.3 2. VCS Joint PD & MR section 6.2 3. VCS Joint PD & MR section 6.2 4. VCS Joint PD & MR section 2.2.2 5. VCS Joint PD & MR section 2.4 6. VCS Joint PD & MR Appendix 2	
1st Response from PP	Date: 10/03/2025
1. In section 2.1.3 of the revised Joint PDMR, the outcome of FPIC have been mentioned and revised as per Joint PD & MR template guide v4.4. 2. In section 6.2 of the revised Joint PDMR, the appendix number has been corrected and revised. 3. In section 6.2 of the revised Joint PDMR, the data/parameter has been revised as per template guideline of Joint PD&MR, v4.4. 4. Currently the project is generating very less amount of hazardous waste at site which is kept at Hazardous Waste Storage Area and as the quantity is very less so it does not pose any threat to the environment. However, PP is reviewing operations to ensure compliance with regulations and the supporting regarding the same has been provided. But in case if more hazardous waste is released in future, a formal agreement would be established with certified disposal agencies and the waste will be disposed to the waste handlers complying with all the local laws for monitoring and disposal. 5. The section has been revised as per the actual scenario. Moreover, there is very minimal amount of consumption of water during the cleaning of panels and the same has been mentioned. 6. The meter serial number has been updated in the revised PDMR version 02 as per the actual scenario and the supporting calibration certificates for the same has been provided.	
Documents provided by PP for review	
Revised joint PDMR, version 02	
Calibration Certificates	
1st Review by Assessment Team	Date: 13-03-2025
1. Assessment team confirms that PP has mentioned outcome of FPIC in revised Joint PD & MR section 2.1.3. Hence, finding is closed. 2. PP has corrected appendix number mentioned in section 6.2 of the revised Joint PD & MR. Hence, finding is closed. 3. Assessment team confirms that PP has updated section 6.2 as per Joint PD & MR template guide v4.4. Hence, finding is closed. 4. PP has provided required justification for this comment which is found correct as per the interviews conducted with management team during onsite visit. Hence, finding is closed. 5. Assessment team confirms that PP has updated section 2.4 and found correct with onsite observation. Hence, finding is closed. 6. The meter details for Parmarth Wind Energy Pvt. Ltd. in the revised Joint PD & MR do not match the onsite meter pictures. Additionally, the calibration details for the replaced meters of SPLLP have not been provided to the assessment team. Hence, finding is open.	
CAR#04 OPEN	
2nd Response from PP	Date: 18/03/2025

2) The main and check meters for Parmarth Wind Energy Pvt. Ltd. was replaced on 01-October-2024. However, the replacement did not occur in the current monitoring period i.e., from 31-March-2023 to 30-September-2024. Therefore, it has no impact on the emission reduction and the calibration is not required. The meters replaced by SPLLP on 01-September-2024 are not calibrated in the specified frequency i.e., once in every 3 years. Therefore, PP has applied the maximum permissible error factor (0.2%) for the delayed period during the monitoring period from 01-September-2023 to 30-September-2024. Therefore, the supporting calibration certificates for the same are not available.	
Documents provided by PP for review	
Revised PDMR	
2nd Review by Assessment Team	Date: 18-03-2025
The justification provided by the PP is acceptable to the assessment team. Also, ER sheet and Joint PD & MR has been assessed and found correct. Hence, finding is closed. CAR#04 CLOSED	

Finding No. 05	Date: 18-02-2025
Finding Type- CAR ☒ CL ☐ FAR ☐	
Stage of finding raised :	
Desk Review	☒
On-site/remote/hybrid assessment	☐
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
VCS Joint PD and MR template V 4.4	
VCS Standard V 4.7	
Non-Conformity	
- Details of all SDG contributions in the current monitoring period is not provided in the ER sheet. - Export and Import values of all months are not correct as per credit note. - The version mentioned in the sheet is not the latest version as per VCS standard. - Version number of the applied methodology is not correct. - Calculation details/source of PLF are not provided in sheet for all the PP's.	
Evidence	
- Actual ER Sheet - Actual ER Sheet for PWEPL & SPLLB - Estimated ER sheet - Estimated ER sheet - Estimated ER sheet	
1st Response from PP	Date: 10/03/2025

1. All SDG contributions in the current monitoring period has been included in the revised ER sheet version 02. 2. All the import and export values has been cross checked and made consistent as per the credit note. 3. The version mentioned in the ER sheet has been revised as per the latest version of VCS standard. 4. The version of the applied methodology has been revised and corrected. 5. The calculation details for source of PLF has been demonstrated for all the PP's and the supporting for the same has been provided along with responses.	
Documents provided by PP for review	
Revised ER sheet PLF Calculation sheet	
1st Review by Assessment Team	Date: 13-03-2025
1. Assessment team confirms that PP has mentioned SDG contributions in the ER sheet. Hence, finding is closed. 2. Assessment team confirms that export import values of all months found correct with credit notes. Hence, finding is closed. 3. PP has correctly mentioned the version in the ER sheet and found correct as per latest version of VCS standard. Hence, finding is closed. 4. PP has updated version of the methodology in revised estimated ER sheet. Hence, finding is closed. 5. Assessment team confirms that PP has added sub sheet of PLF calculation in Estimated ER sheet in which all calculation details for PLF has been calculated for all the PP's. Hence, finding is closed.	
CAR#05 CLOSED	

Finding No. 06	Date: 18-02-2025
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of finding raised :	
Desk Review	☒
On-site/remote/hybrid assessment	☐
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
VCS Joint PD and MR template V 4.4 VCS Standard V 4.7	
Non-Conformity	
Supporting documents and sufficient data to support the information and data presented in the VCS Joint PD & MR Version 01 is not provided by PP.	
Evidence	

1. PP has not provided commissioning certificate. 2. PP has not provided evidence to confirm the ownership of the project activity. 3. PP has not provided evidence to confirm the start date of this project activity. 4. PP has not submitted no double counting declaration letter to confirm that project is not seeking credits under another GHG program. 5. PP has not provided information regarding employment generated during current monitoring period. 6. PP has not provided evidence to confirm the date of stakeholder consultation. 7. PP has not provided evidence to confirm that no grievances were received during current MP. 8. PP has not provided training records 9. PP has not provided company policies details to the VVB. 10. PP has not provided evidences to confirm the technical details of Wind and solar power plant. 11. PP has provided breakdown details for the current monitoring period. 12. PP has not provided evidence to confirm that internal audit is followed by PP as per ISO standard. 13. Calibration details has been not provided by PP.	
1st Response from PP	Date: 10/03/2025
1. PP has submitted the commissioning certificate. 2. PP has provided the evidence in support of the ownership of the project activity. 3. PP has provided the supporting document for start date of this project activity. 4. PP has submitted declaration regarding no double counting confirming that project is not seeking credits under another GHG program. 5. PP has submitted supporting documents for the employment generation during the current monitoring period. 6. The date of stakeholder consultation is as per the registered PDD version 3.0 and the supporting document for the same has been submitted. 7. The grievance register for the current monitoring period has been submitted as supporting documents 8. The training records for the current monitoring period has been provided as supporting documents 9. The company policies details have been submitted. 10. The technical details of Wind and solar has been provided. 11. The breakdown details for the current monitoring period have been submitted. 12. There is no internal audit as per ISO standard. Hence it has been revised accordingly. 13. PP has submitted the calibration certificates as supporting documents.	
Documents provided by PP for review	
1. Commissioning Certificate 2. Ownership of the project activity 3. Supporting document for start date 4. No double counting declaration 5. Employment records 6. Grievance Register 7. Training Records 8. Company policies 9. Breakdown details 10. Calibration Certificates	
1st Review by Assessment Team	Date: 13-03-2025
11. PP has submitted Commissioning Certificate 12. PP has not submitted evidence to confirm Ownership of the project activity 13. PP has submitted Supporting document for start date 14. PP has submitted declaration letter for No double counting declaration 15. PP has submitted Employment records 16. PP has provided PD version 3.0 to confirm the date of stakeholder consultation.	

17. PP has provided Grievance Register 18. PP has provided Training Records 19. PP has provided Company policies (no discrimination policy) 20. PP has not provided evidences to confirm the technical details of Wind and solar power plant 21. PP has mentioned Breakdown details in appendix 3 of the revised Joint PD & MR 22. PP has provided Calibration Certificates CL#06 OPEN	
2nd Response from PP	Date: 18/03/2025
1. PP has provided the evidence in support of the ownership of the project activity. 2. PP has provided the evidences to confirm the technical details of Wind and solar power plant	
Documents provided by PP for review	
1. Power purchase agreement 2. Technical details of solar and wind	
2nd Review by Assessment Team	Date: 18-03-2025
Assessment team confirms that PP has provide PPA and Technical specification documents. Hence, finding is closed. CL#06 CLOSED	

Finding No. 07	Date: 18-02-2025
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of finding raised :	
Desk Review	☒
On-site/remote/hybrid assessment	☒
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
VCS Joint PD and MR template V 4.4 VCS Standard V 4.7	
Non-Conformity	
1. During onsite visit, it has been noted through interview that total number of people currently employed in the project is not correctly mentioned in the report. 2. The assessment team has not found the grievance register at the project site office during the onsite visit. 3. The assessment team has not found bird strike register at any sites of this project activity. 4. During the site visit, it has been found that water from vendors has been used for cleaning purposes. PP has to provide evidence to confirm the water consumption at the site. 5. The Joint PD & MR does not include information about the O&M entity for each PP. However, the assessment team found during the onsite visit that each PP either has an in-house team or a separate agreement for the operation and maintenance of the plant. 6. PP has mentioned in the report that currently some women are employed however during the interview with the site personnel at the project sites, it has been found that women have not been working due to the remote location of the sites.	

Evidence	
1. VCS Joint PD & MR section 1.18.2 (SDG Table 1) 2. VCS Joint PD & MR section 2.1.4 3. VCS Joint PD & MR section 2.4 4. VCS Joint PD & MR section 2.4 5. VCS Joint PD & MR section 6.3 6. VCS Joint PD & MR section 2.3.1	
1st Response from PP	Date: 10/03/2025
1. In section 1.18.2.(SDG Table 1) of the revised Joint PDMR, the total number of people currently employed in the project activity has been revised. Along with that the supporting documents for the same has been submitted. 2. The register was temporarily moved to the corporate office for internal review process. Now it is available at site and a copy of the grievance register has been provided as the supporting document. 3. The bird strikes register was temporarily moved to the corporate office for internal review process. Now it is available at site and a copy of same has been provided as the supporting document. 4. There is very minimal amount of consumption of water during the cleaning of panels and the same has been revised and mentioned in the revised PDMR version 02. 5. In section 6.3 of the revised joint PDMR, the information about the O&M entity either in-house team or a separate for each PP has been updated as per the actual scenario. 6. The PP promotes equal job opportunities, regardless of gender but as the project activity is located in remote location so women don't prefer to work. Thus, section 2.3.1 of the joint PDMR has been revised accordingly and the supporting for the same has been provided.	
Documents provided by PP for review	
1. Employment records 2. Grievance Register 3. Bird Strike Register 4. O&M Agreement for each PP 5. Company policy	
1st Review by Assessment Team	Date: 13-03-2025
1. PP has corrected number of people employed in the project activity which is found correct as per onsite visit and employment record submitted to VVB. Hence, finding is closed. 2. The provided justification by the PP is acceptable to assessment team. Hence, finding is closed. 3. PP has provided bird strike register for the assessment hence, finding is closed. 4. PP has corrected and mentioned section 2.4 in revised joint PD & MR and found correct as per interview with the O & M team during onsite audit. Hence, finding is closed. 5. Assessment team confirms that PP has mentioned information of O&M entity for each PP in section 6.3 which is found correct as per onsite visit. Hence, finding is closed. 6. PP has corrected information mentioned related to women's working at the site in section 2.3.1 of revised PD & MR. Hence, finding is closed.	
CL#07 CLOSED	

Finding No. 08	Date: 13-03-2025
Finding Type- CAR ☒ CL ☐ FAR ☐	

Stage of finding raised :	
Desk Review	☒
On-site/remote/hybrid assessment	☐
Technical Review	☐
Project Review Report by Registry	☐
Requirement	
VCS Joint PD and MR template V 4.4	
VCS Standard V 4.7	
Non-Conformity	
PP has not considered degradation factor in the calculation provided in ER sheet for solar project.	
Evidence	
ER sheet version 2	
1st Response from PP	Date: 18/03/2025
The degradation factor has been applied as per the solar module specifications and the same been provided in the revised ER sheet for solar project.	
Documents provided by PP for review	
Revised ER sheet	
1st Review by Assessment Team	Date: 18-03-2025
Assessment team confirms that PP has applied degradation factor in the revised ER sheet for the solar project. Hence, finding is closed.	
CAR#08 CLOSED	

Finding No. 09	Date: 26-03-2025
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of finding raised :	
Desk Review	☐
On-site/remote/hybrid assessment	☐
Technical Review	☒
Project Review Report by Registry	☐

Requirement	
VCS Joint PD and MR template V 4.4	
VCS Standard V 4.7	
Non-Conformity	
1. PP has to clarify how the stated information is correct, as the monitoring period in both vintages includes the rainy season (June to September). 2. PP has not provided breakdown details for Sidhidata Solar Urja Ltd.	
Evidence	
1. VCS Joint PD & MR section 7.5 2. VCS PD & MR: Appendix 3	
1st Response from PP	Date: 26/03/2025
1. The statement has been updated in the revised joint PD & MR. 2. The breakdown details for Sidhidata Solar Urja Ltd. have been provided and the same has been incorporated in the revised joint PD&MR.	
Documents provided by PP for review	
Revised joint PD&MR	
Breakdown details	
1st Review by Assessment Team	Date: 26/03/2025
1. Assessment team confirms that PP has corrected the stated information in revised joint PD & MR which is now correct. Hence, finding is closed. 2. The assessment team confirms that PP has provided the breakdown details for Shidhidata in the breakdown sheet and has also updated Appendix 3 in the Joint PD & MR. Hence, finding is closed.	
CL#09 CLOSED	

APPENDIX 4: COMPETENCE STATEMENT

Team Leader and Technical Expert (1.2)



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Vivek Kumar Ahirwar
Nationality	Indian
Countries of Experience	India, Madagascar, Thailand, Nepal, South Africa, Vietnam, Mozambique, Kenya, Ethiopia, Spain, Singapore, Zimbabwe, Columbia, Zambia, Libya, Indonesia, Myanmar
Educational Qualification	B.E. (Mechanical) M.Tech. (Energy Management)
Year of Experience	15 Years +
Area of Expertise	Climate Change & Environment & Industry
Eligible Sectoral Scope	SS 1 – TA 1.1 Thermal Energy & Biomass SS 1 – TA 1.2 Renewable /Non-renewable SS 2 – TA 2.1 Energy Distribution SS 3 – TA 3.1 Energy Demand SS 13 – TA 13.1 Solid Waste and Wastewater He is a GS Approved Auditor

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	YES
Local Expert (India)	YES
TA Expert (TA 1.1, 1.2, 2.1, 3.1, 13.1)	YES
Financial Expert	YES

Reviewed by	Apoorva Gupta (Quality Manager)	Date	12/09/2024
Approved by	Barun Kumar (Technical Manager)	Date	12/09/2024

History of the Document

Version	Date	Amendment Summary*	Prepared By	Approved By
1.3	30/07/2024	Inclusion of Filling guideline for eligible sectoral scope and other editorial changes	Apoorva Gupta	Dr. Vikas Kumar Aharwal
1.2	29/11/2022	Inclusion of Project Trainee, Validator/Verifier Trainee and Local Expert (Country Wise) in roles Table.	Vandana Gupta	Dr. Vikas Kumar Aharwal
1.1	22/07/2021	NA	Ayushi Garg	Vikas Aharwal
1.0	27/03/2020	NA	Ayushi Garg	NA

Validator/Verifier



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Monika Jha
Nationality	Indian
Countries of Experience	India
Educational Qualification	B.Sc. – CBZ M.Sc. - Environmental Sciences PG Diploma - Environmental Sciences and Sustainable Development
Year of Experience	3 Years
Area of Expertise	Climate Change & Environment Industry
Eligible Sectoral Scope	She is a GS-approved Auditor

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	NO
Technical Reviewer	NO
Local Expert (Country Wise)	NO
TA Expert (X.X)	NO
Financial Expert	NO

S

Reviewed by	Apoorva Gupta (Quality Manager)	Date	12/09/2024
Approved by	Barun Kumar (Technical Manager)	Date	12/09/2024

Validator/Verifier Trainee



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Komal S Kumari
Nationality	Indian
Countries of Experience	India, Madagascar
Educational Qualification	M.Sc. (Environmental Science) B.Sc. (Physics Honors)
Year of Experience	1 Years
Area of Expertise	Climate Change & Environment / Industry
Eligible Sectoral Scope	NA

Roles

Project Trainee	NO
Validator/Verifier Trainee	YES
Validator	NO
Verifier	NO
Team Leader	NO
Technical Reviewer	NO
Local Expert <i>(Country Wise)</i>	NO
TA Expert <i>(X.X)</i>	NO
Financial Expert	NO

Reviewed by	Apoorva Gupta (Quality Manager)	Date	06/12/2024
Approved by	Barun Kumar (Technical Manager)	Date	06/12/2024

History of the Document

Version	Date	Amendment Summary*	Prepared By	Approved By
1.3	30/07/2024	Inclusion of Filling guideline for eligible sectoral scope and other editorial changes	Apoorva Gupta	Dr. Vikas Kumar Aharwal
1.2	29/11/2022	Inclusion of Project Trainee, Validator/Verifier Trainee and Local Expert (Country Wise) in roles Table.	Vandana Gupta	Dr. Vikas Kumar Aharwal
1.1	22/07/2021	NA	Avishi Garg	Vikas Aharwal

Technical Reviewer and Technical Expert (1.2)



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Akhilesh Joshi
Nationality	Indian
Countries of Experience	India, China, Sri Lanka, Bangladesh, Pakistan, Bhutan, Myanmar, Lao PDR, Cambodia, Vietnam, Thailand, Malaysia, Turkey, Georgia, Jordan, Madagascar, Zambia, Malawi, Zimbabwe, Mozambique, Kenya, Angola, Uganda, Tanzania, Nigeria, Guatemala, Mexico
Educational Qualification	MBA (Oil & Gas management) BE (Chemical Engineering)
Year of Experience	17 Years
Area of Expertise	Climate Change & Environment / Industry
Eligible Sectoral Scope	SS 1 – TA 1.1 - Thermal Energy generation from fossil fuels as well as thermal electricity from Solar SS 1 – TA 1.2 - Energy generation from renewable Energy sources SS 3 – TA 3.1 - Energy demand SS 4 – TA 4.1 – Manufacturing Industries (Cement sector) SS 8 – TA 8.1 - Mining and Mineral Processes SS 10 – TA 10.1 - Mining and Mineral Processes SS 13 – TA 13.1 - Solid Waste and Wastewater He is a GS Approved Auditor

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	YES
Local Expert (Country Wise)	YES
TA Expert (1.1, 1.2, 3.1, 4.1, 8.1, 10.1, 13.1)	YES
Financial Expert	YES

Reviewed by	Apoorva Gupta (Quality Manager)	Date	08/09/2024
Approved by	Barun Kumar (Technical Manager)	Date	09/09/2024

History of the Document

Version	Date	Amendment Summary*	Prepared By	Approved By
1.3	30/07/2024	Inclusion of Filling guideline for eligible sectoral scope and other editorial changes	Apoorva Gupta	Dr. Vikas Kumar Aharwal
1.2	20/11/2022	Inclusion of Project Trainee	Vandana Gupta	Dr. Vikas Kumar