



RENEWABLE POWER PROJECT BY SAIPURAM WIND ENERGIES PRIVATE LIMITED



Document Prepared by **VKU Certification Pvt. Ltd.**

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Summary:

VKU Certification Pvt. Ltd. (here after referred as VKU) was commissioned by Infinite Solutions and has verified the greenhouse gas emission reduction reported for the project activity “Renewable Power Project by Saipuram Wind Energies Private Limited” (VCS ID 1788¹), covering fourth monitoring period from 01-January-2021 to 31-December-2022 (inclusive of both the dates) under first renewable crediting period from 31-March-2017 to 30-March-2027 (inclusive of both the dates) with regards to the relevant requirements for VCS activities.

Purpose of the Verification: The objective of the verification process is to obtain an impartial evaluation of the ex-post determination of the monitored reductions in greenhouse gas (GHG) emissions. This verification aims to ensure that the monitoring methodology was implemented in accordance with the monitoring plan, and that the monitoring data used to validate the reductions in anthropogenic emissions from sources is thorough, conclusive, and presented in a clear and transparent manner.

The verification scope of the project is:

- To verify that the project is implemented as described in the registered VCS Joint PD & MR /3/.
- To evaluate the project's adherence to relevant regulations, including the legislation of the host country.
- To verify the implementation and functionality of the monitoring system, ensuring the generation of Verified Carbon Units without any instances of double counting.
- To verify the accuracy, completeness, consistency, transparency, and absence of significant errors or omissions in the reported data by examining monitoring records and emissions reduction calculations.
- To ensure that the actual monitoring systems and procedures align with those described in the monitoring plan.
- To assess the GHG emission reduction data and provide a conclusion with a reasonable level of assurance regarding the absence of material misstatements.
- To verify that the reported GHG emission data is adequately supported by evidence.

VKU conducted the verification process in accordance with its own established procedures, aligning with the requirements set forth in the VCS Program Guide version 4.4 /6/, VCS Standard version 4.5 /7/, VCS Validation and Verification Manual version 3.2 /8/, the latest version of the CDM Validation and Verification Standard 3.0 /11/, and relevant decisions of the COP/MOP and the CDM EB and applying standard auditing techniques.

These requirements encompass Article 12 of the Kyoto Protocol, the CDM Modalities and Procedures as agreed in the Marrakech Accords under decision CMP.1, the annexes to this decision, subsequent decisions and guidance provided by COP/MOP & CDM Executive Board, and other applicable rules, including the Host Country legislation. Furthermore, standard auditing techniques were applied throughout the verification process.

¹<https://registry.verra.org/app/projectDetail/VCS/1788>

The verification process encompassed a desk review, on-site assessment, resolution of any outstanding matters, and the issuance of the final verification report and certification. This comprehensive verification aimed to ensure that the reported emission reductions are thorough and precise, aligning with the relevant VCS requirements, thus enabling the project to obtain certification.

During this verification, 04 Corrective Action Requests (CARs), 03 Clarification Requests (CLs) and 00 Forward Action Request (FAR) were identified related to operation, monitoring and GHG emission reduction calculation of the VCS project activity in relation to all relevant VCS requirements for the project activity and the applied baseline and monitoring methodology, and these CARs and CLs are successfully closed after necessary corrections/clarifications by the client. No FAR was raised during this verification. The same has been discussed in [Appendix B](#) of this verification report.

The verification team ensured that the reported emission reductions are complete and accurate in accordance with applicable VCS requirements to be certified therefore the verification team has detected no further uncertainties. In conclusion, it is VKU's opinion that the project activity "Renewable Power Project by Saipuram Wind Energies Private Limited." (VCS ID 1788), meets all relevant requirements for VCS standard and guidelines and correctly applies the baseline and monitoring methodology ACM0002 "Grid Connected Renewable Electricity Generation from renewable sources" Version 18.1 /11/. 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 the fourth monitoring period from 01-January-2021 to 31-December-2022 (inclusive of both the dates) under first renewable crediting period from 31-March-2017 to 30-March-2027 (inclusive of both the dates) amounts to 358,087 tCO_{2e}.

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1 INTRODUCTION

1.1 Objective

Infinite Solutions has commissioned VKU Certification Pvt Ltd. (hereafter as VKU) to carry out the fourth periodic verification of the project “Renewable Power Project by Saipuram Wind Energies Private Limited” (VCS ID 1788) for the monitoring period from 01-January-2021 to 31-December-2022 (inclusive of both the dates) under first renewable crediting period from 31-March-2017 to 30-March-2027 (inclusive of both the dates).

The purpose of the verification is to have an independent evaluation of a project activity by an accredited validation and verification body against the requirements of the VCS program guide Version 4.4/6/, VCS standard version 4.5/7/ and GHG program applied, on the basis of the registered project description.

The verification is for the fourth monitoring period from **01-January-2021 to 31-December-2022 (730 days) (inclusive of both the dates)** that falls under the first renewable crediting period² from **31-March-2017 to 30-March-2027**.

Table No 01: Number and time period of Verification under first crediting period:

First Crediting Period: 31-March-2017 to 30-March-2027, Including of both dates		
Periodic Verification No.	Monitoring Period	Number of years
1 st in VCS	(31-March-2017 to 03-August-2018) (Inclusive of both the dates)	1 year 04 months 04 days
2 nd in VCS	(04-August-2018 to 03-October-2019) (Inclusive of both the dates)	1 year 02 months 00 days
3 rd in VCS	(04-October-2019 to 31-December-2020) (Inclusive of both the dates).	1 year 02 months 28 days
4 th in VCS (Current Monitoring Period)	(01-January-2021 to 31-December-2022) (Inclusive of both the dates).	2 years 00 month 00 days

² The first renewable crediting period for the project activity is from 31-March-2017 to 30-March-2027. (As per registered VCS Joint PD & MR version 03 dated 16-November-2018).

The objectives of this verification exercise are: -

- review of objective evidence to establish that the monitoring system is operational and capable of generating Verified Carbon Units (VCUs) without any instances of double counting /28/,
- to ensure the accuracy, completeness, consistency, transparency, and absence of significant errors or omissions in the reported data,
- an examination of the monitoring records and emission reduction calculations.

This aims to establish the reliability and integrity of the data.

1.2 Scope and Criteria

The verification scope is:

- To verify that the project is implemented as described in the registered VCS Joint PD & MR/3/.
- To assess the project's compliance with other relevant rules including the host country legislation.
- To confirm that the monitoring system is implemented and fully functional to generate VCUs without any double counting.
- 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.
- To verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan;
- 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;
- To verify that reported GHG emission data is sufficiently supported by evidence

The verification process is essential to certify that the reported emission reductions are comprehensive and accurate. The project undergoes evaluation based on the requirements outlined in VCS standard version 4.5 /7/, VCS program guide version 4.4 /6/, VCS validation and verification manual version 3.2 /8/, and relevant rules and guidance.

VKU has followed the recommendations provided in the latest version of the VCS validation and verification manual /8/. The verification process employs a rule-based approach, with a focus on identifying significant reporting rules and ensuring the reliability of project monitoring.

The verification method and criteria encompassed several phases, including

- (i) Desk review of VCS Joint PD & MR, registered under version 03 on 16-November-2018 /3/and other supporting documents listed in [Table-05](#);
- (ii) Onsite interviews & Focussed Group Discussions with Stakeholders & PP representatives involved in project's implementation.

- (iii) Resolution of outstanding issues and Completeness/Quality Check and the Final issuance of the verification report and applicable VCS Verification Deed of Representation.

It is important to note that the verification process does not involve providing consultancy to the project proponents. However, requests for clarifications and corrective actions may have contributed to improvements in the monitoring process.

1.3 Level of Assurance

All the revisions of the verification report before being submitted to the client were subjected to an independent internal technical review to confirm that all verification activities had been completed according to the pertinent VKU's procedure, with a **reasonable level of assurance**, as per section 04 clause 4.1.2 of the VCS Standard version 4.5 /7/.

The threshold for quantitative materiality with respect to the aggregate of errors, omissions, and misrepresentations, relative to the total reported GHG emission reductions and/or removals was 5% percent, as required by clause 4.1.13 of the VCS Standard version 4.5 /7/.

The verification report is based on the Monitoring report /1/, VCS Joint PD & MR, registered under version 03 on 16-November-2018 /3/ & supporting documents /23/, /22/, /24/, /25/, /26/, /27/, /28/, /29/, /30/, /31/, /34/, /35/ that were made available to the VKU's assessment team are to the verification team and information collected through performing interviews /32/ with PP Representatives/ Local Stakeholders during on-site visit /33/.

The technical review was performed by a technical reviewer qualified in accordance with VKU's qualification procedure. The verification team and the technical reviewers consist of the following personnel.

Table No 02: Role/Qualification of Verification team:

Role/Qualification	Last Name	Middle Name	First Name
VCS Team Leader	Ahirwar	Kumar	Vivek
Technical Expert (T.A. 1.2, Wind)	Ahirwar	Kumar	Vivek
Validator/Verifier	Sharma	NA	Deepali
Project Trainee	Jha	NA	Monika
Local Expert (India)	Ahirwar	Kumar	Vivek

Table No 03: Role/Qualification of Technical Review team:

Role/Qualification	Last Name	Middle Name	First Name
Technical Reviewer & Technical Expert (T.A. 1.2, wind)	Kumar K	NA	Sanjay

1.4 Summary Description of the Project

The project activity involves electricity generation by wind electric generators (renewable source) and supplying the generated electricity to the state grid system which is under the purview of the National Electricity Grid of India. This is a greenfield project activity i. e. there was no renewable energy-based electricity generation facility in the site of this project and equivalent amount of electricity would have been supplied by fossil-fuel dominated grid – which is pre-project scenario as well as baseline scenario for this project activity. The project activity ensures the reduction of greenhouse gas (GHG) emissions that are real, measurable, and verifiable and also plays beneficial role in the mitigation of climate change.

The project activity involves installations of 50 wind turbines of 2.1 MW (25 WTGS) and 2.0 MW (25 WTGS) capacity each aggregating to 102.5 MW in the state of Andhra Pradesh. All the WTGS manufactured by Gamesa and Suzlon are functioning well since commissioning and this can be further confirmed from documents uploaded on [VERRA](#). **The project was commissioned on 31-March-2017 which is the earliest date of interconnection with the grid** and is running satisfactorily since then and these dates are verified against Registered VCS Joint PD & MR /3/ and commissioning certificate /29/.

Table No 04: Wind Power Project Details

Project Participant	Project Type	Project Capacity	Date of Commissioning	Project location	State
Saipuram Wind Energies Private Limited	Wind	102.5 MW	31-March-2017	Rudrampalli, Borampalli, Elagalavanka & Basavapuram in Anantapuram	Andhra Pradesh

Start date of this project activity is 31-March-2017

As per MR /1/, the electricity generated from the project is supplied to the state grid system which is under the purview of the Unified Indian Grid which is confirmed from registered VCS Joint PD & MR, version 03, dated 16-November-2018 /3/ JMRs issued by State electricity Board /26/ and last verification report /4/ and interview with PP /32/.

This information was verified during on site assessment and found to be in line with the details provided in the registered VCS Joint PD & MR /3/. The total emission reductions achieved in this monitoring period i.e., from 01-January-2021 to 31-December-2022 (inclusive of both the dates) is 358,087 tCO₂e. The net electricity generated by the project activity that was evacuated to the grid during the current monitoring period (fourth monitoring period) of 01-January-2021 to 31-December-2022 (inclusive of both the dates) is 377,929.11 MWh.

2 VERIFICATION PROCESS

2.1 Method and Criteria

Verification was conducted using VKU's procedures in line with the requirements specified in the VCS Requirements, i.e., VCS Program Guide version 4.4/6/, VCS Standard Document version 4.5 /7/. As per VCS PD version 03 dated 16-November-2018 /3/ the project activity does not fall under category "grouped projects", hence no sampling methods were employed by VKU's assessment team for the verification of GHG emission reductions or removals generated by the project, however 100% data was verified. The GHG emission reductions are based on the approved Baseline and monitoring methodology ACM0002 "Approved Consolidated baseline methodology for grid-connected electricity generation from renewable sources" version 18.1 /11/.

Scope: 01 Energy Industries (renewable- and non-renewable sources) Title: "Grid Connected Renewable Electricity Generation".

Monitoring mechanisms used in the project were checked and as mentioned in MR/1/ and VCS Joint PD & MR /3/ meter readings are the only source for measuring energy generation so these readings are crosschecked from the JMRs /26/ and invoices /27/ and the accuracy class, details for meter calibration, meter type, make and model of the meters are checked via Calibration certificates /24/ during desk review as well as on-site assessment.

The verification consisted of the following phases:

1. Planning: The assessment team plans the GHG-programme site visit and starts with a desk review. Assessment team also shared a NOVS Notice of Validation/Verification Services (NOVS) Form and submit it to auditing@verra.org, 15 business days before the initial meeting with the project proponent.
2. Strategic Analysis: Assessment team performed strategic analysis to understand the activities and complexity of the project, and to determine the nature and extent of the verification activities. The results of the strategic analysis shall be used in the risk assessment.
3. Risk Assessment; Assessment team performed risk assessment of the GHG statement to identify the risk of a material misstatement or nonconformity with the criteria.

4. Evidence Gathering Activities; Using a risk-based approach assessment team prepared evidence gathering activities, to collect sufficient and appropriate evidence upon which the conclusion shall be based. It will also determine whether the GHG statement conforms to the criteria, taking into account the principles of the standards or GHG programme that apply to the GHG statement.
5. Need for site visit is identified and site visit is planned.
6. Audit Plan: An audit plan is prepared, including all sub-elements required for an integrated verification process aligned with the contract, scope, objectives, level of assurance, and materiality.
7. Evidence Gathering Plan; The evidence-gathering plan is prepared based on the results of the VKU's Assessment Team's risk assessment. It was designed to lower the verification risk to an acceptable level. The evidence-gathering plan thus specify the type and extent of evidence-gathering activities.
8. Client Confirmation: The site visit audit plan is sent to the client for review and confirmation.
9. Document Review: Relevant documents, such as the verification report, monitoring plan, methodology, VCS PD, and QA/QC procedures, are thoroughly reviewed.
10. On-Site Assessment: This includes interviews and evaluation of the actual project scenario.
11. Resolution of Discrepancies: Any non-conformities identified during the assessment are addressed and resolved.
12. Independent Review: A technical reviewer provides an independent assessment.
13. Final Verification: After completeness checks, the verification report and certification are issued.

The following sections outline each step in more detail.

2.2 Document Review

The verification was performed primarily based on the review of the monitoring report (MR) version 01 dated 09-May-2023, version 02 dated 20-July-2023 and Version 03 of 05-October-2023 /1/ and the emission reduction calculations spreadsheet version 01 dated 09-May-2023, version 02 dated 20-July-2023 and Version 03 dated 05-October-2023 /2/ were assessed as part of the verification. In addition, the registered VCS Joint PD & MR /3/ in particular the baseline estimations and the monitoring plan for the project was reviewed. The following table lists the documentation that were reviewed during the verification.

As per section 3.26 and clause 3.26.3 of the VCS Standard version 4.5 /7/ 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 monitoring report /1/. Thus, the assessment team reviewed the following documents during verification:

Table No 05: Lists of the documentation that was reviewed during the verification:

/1/	Infinite Solutions: VCS monitoring report for “Renewable Power Project by Saipuram Wind Energies Private Limited.” • Version 01 of 09-May-2023 • Version 02 of 20-July-2023 • Version 03 of 05-October-2023
/2/	Infinite Solutions: Emission Reduction Calculation Spreadsheet • Version 01 of 09-May-2023 • Version 02 of 20-July-2023 • Version 03 of 05-October-2023
/3/	Registered VCS Joint PD & MR- “Renewable Power Project by Saipuram Wind Energies Private Limited” version 03 dated 16-November-2018
/4/	<u>TUV SUD: Final Verification report “Renewable Power Project by Saipuram Wind Energy Private Limited” version 2.0 dated 26-April-2021 covering monitoring period 04-October-2019 to 31-December-2020</u>
/5/	<u>LGAI Technological Center S.A- VCS Joint Validation Verification Report version 02 dated 08-December-2018</u>
/6/	<u>VCS Program Guide, version 4.4 dated 29-August-2023</u>
/7/	<u>VCS Standard, version 4.5 dated 29-August-2023</u>
/8/	<u>Validation and verification manual version 3.2 dated 19-October-2016</u>
/9/	<u>VCS Program Definitions version 4.3 dated 21-December-2022</u>
/10/	<u>VCS Registration & Issuance Process (Version 4.3) of 17-January-2023</u>
/11/	<u>CDM Executive Board: Baseline and Monitoring Methodology ACM0002 “Grid Connected Renewable Electricity Generation from renewable sources” Version 18.1</u>
/12/	<u>Tool to calculate the emission factor for an electricity system, Version 07.0</u>
/13/	<u>CO₂ Baseline Database for the Indian Power Sector User Guide Version 13.0</u>
/14/	<u>VCS: Monitoring report Template VCS Version 4.2</u>
/15/	VERRA: https://registry.verra.org/app/projectDetail/VCS/1788
/16/	REC website Renewable Energy Certificate Registry of INDIA https://www.recregistryindia.nic.in/index.php/publics/faqs
/17/	<u>I-REC Standard - The International REC Standard Foundation (irecstandard.org)</u>
/18/	GPS map camera (GPS App)
/19/	GPS Google earth software used for Location
/20/	EIA Report & EIA NOTIFICATION dated 14-September-2006; https://moef.gov.in/wp-content/uploads/2018/03/so1533.pdf
/21/	Central Electricity Authority (Installation and Operation of Meters) Regulations Notified on 17-March-2006 <u>No. 502/70/CEA/DP&D</u> Amendments Notified on 26-June-2010 <u>No. 502/6/2009/DP&D/D-I</u> https://cea.nic.in/wp-content/uploads/2020/02/meter_reg.pdf

	<u>Metering Regulations Archives - Central Electricity Authority (cea.nic.in)</u>
/22/	PPA: Power Purchase Agreements signed between Project Proponent and Southern Power Distribution Company of A.P. Limited
/23/	O & M Service Agreement
/24/	Certificates of Calibration for all the meters belongs to project activity
/25/	Generation Log Book
/26/	JMRs issued by Southern Power Distribution Company of A.P. Limited to PP for the current verification period
/27/	Invoice issued by PP to Southern Power Distribution Company of A.P. Limited
/28/	Letter of declaration from PP regarding not having created or sought any other form of environmental credit for the same period
/29/	Commissioning certificate of all the WTGs of the project activity issued by state electricity authority
/30/	Technical Specifications of WTGs.
/31/	Grievance Register present on-site
/32/	On site personnel interview dated 06-June-2023
/33/	Site Visit Photographs and attendance sheet dated 06-June-2023
/34/	Breakdown Details PP has submitted Breakdown Details in an Excel Sheet.
/35/	Training records of Site Personnels

2.3 Interviews

An on-site inspection has been performed by the assessment team. The representatives of the PP and O&M contractors were interviewed personally by assessment team on **06-June-2023 in Andhra Pradesh** i.e., personnel responsible for monitoring of the project activity, data collection and management, and QA/QC procedure. The details of the people interviewed are mentioned in the table below.

Table No 06: Interviews at Wind Power Project site with site personnel

S No.	Name	Organization	Topic
1.	E.V Venugguli (Male)	Saipuram Wind Energies Pvt. Ltd.	Responsibility for Maintaining the data records, completeness of data, and

			reliability of data (calibration of equipment's), QA/QC
2.	Vijay Bhallu (Male)	Saipuram Wind Energies Pvt. Ltd.	O&M discussion of WTGs, SCADA System, Management Practices
3.	S. Niranjana (Male)	Saipuram Wind Energies Pvt. Ltd.	Site management practices
4.	Siddanna govind H. (Male)	Saipuram Wind Energies Pvt. Ltd.	O&M discussion of WTGs, SCADA System, Management Practices
5.	Galla. Hari Kiran (Male)	Saipuram Wind Energies Pvt. Ltd.	Site management practices

The topics covered during interview ranged from general features and implementation of project to technical details of the project like calibration details, monitoring and measuring system and data collection, recording and archiving procedures. The assessment was drawn based on the feedback received during telephonic interview coupled with the documentation.

During Onsite Visit /33/, Assessment team also interviewed the local stakeholders involved in the projects to verify the implementation and process of grievance resolution as claimed and mentioned in the Monitoring report /1/ (refer section 2.2 of MR) by the PP. The assessment team confirmed the sustainable development claims and assessed the socio-economic impact of the project on the local community and details about the same is provided in [section 4.1](#) of this report. Assessment Team also checked the records and observed that the PP provided opportunities for the locals to express their opinions and grievances, with efforts to resolve any issues through consultation with stakeholders. Assessment team thus verified all the above statements via focussed group discussions and personal interview /32/ with stakeholders and was hence acceptable to VKU that PP has a well-defined procedure for involving local stakeholders in the project implementation and that their grievances are resolved appropriately as tabulated below:

Table No 07: Interviews at Wind Power Project site with Local Stakeholders

S No.	Name	Category	Topic
1.	B. Madhav Babu (Male)	Local Stakeholder	Implementation of Project activity and its impact on the economic, social and environmental parameters around the located project activity and on the local people of the area.
2.	T. Romi Reddy (Male)	Local Stakeholder	
3.	M. Ramjitendra (Male)	Local Stakeholder	The employment generation due to project activity implementation.

			Salary and other facilities like safety equipment provided on site during
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2.4 Site Visits

An Onsite visit was undertaken by the verification team to the project location identified in the MR at Anantapuram District on **06-June-2023** in Andhra Pradesh state India to carry out the following;

- A review of the operation and implementation of the registered project activity in accordance with the VCS Joint PD & MR /3/ and VCS MR /1/approved documents;
- An analysis of the information flows used to generate, aggregating and reporting the monitoring parameters;
- Interviews /32/ with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the registered VCS Joint PD & MR /3/.
- A cross check between information provided in the monitoring report and data from other sources such as plant logbooks, inventories, purchase records or similar data sources;
- A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PD, 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.

2.5 Resolution of Findings

The objective of this phase of the verification is to resolve any outstanding issues which need to be clarified for VKU's positive conclusion on the project description. To guarantee transparency a verification protocol has been customized for the project. The protocol shows in a transparent manner the requirements, means of verification and the results from verifying the identified criteria. The verification protocol consists of three situations in tables; the different columns in these tables are described below.

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

- If monitoring and reporting reveal non-conformities with the monitoring plan or methodology, or if the evidence offered to demonstrate conformity is insufficient;
- Errors in the application of assumptions, data, or calculations of emission reductions have been made, which will affect the estimate of emission reductions;

- The project's proponent has not addressed issues encountered in a FAR during validation to be assessed during verification.

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 subsequent 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 summary, **03 CLs and 04 CARs** were raised during this verification which were closed successfully and **00 FAR** was raised during this verification. Details are given under Appendix B of this report.

2.5.1 Forward Action Requests

This is fourth periodical VCS verification of the project activity and no FAR is raised from previous VCS verifications based on the review of previous Verification Report /4/. No FAR is open for this verification as well.

2.6 Eligibility for Validation Activities

VKU has not undertaken any validation activities as part of the verification and does not hold accreditation for validation of any relevant sectoral scope, hence this section is not applicable. It is to further conclude that during current verification there is no validation assessment undertaken either by VKU and the same was confirmed with focussed group discussions/32/ and interview with the PP during site visit/32/. Assessment team assessed the VERRA's website on 09-October-2023: <https://verra.org/validation-verification/vku-certification-pvt-ltd/#vcs> wherein the scope of services of VKU certification Pvt. Ltd. is mentioned as verification. VKU Certification Pvt. Ltd is currently undergoing validation accreditation with ANAB for which witness audit has already been conducted. Thus, ensuring that the accreditation details mentioned in FVR is consistent and correct.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

The project has not applied under any other GHG program except VCS for current monitoring period, 01-January-2021 to 31-December-2022 (inclusive of both the dates). The project is

registered under VCS only with project ID VCS 1788³. This was confirmed by checking VERRA registry website and similar exercise was performed for CDM/GS/GCC/UCR registries with similar project title/capacity and Project Proponents but the assessment team was not able to trace any such project registered under any of the above stated registries or under any other similar mechanisms. This was supported from the declaration /28/ submitted by PP in which they claimed that same GHG emission reductions of the project from VCS for the current monitoring period will not be claimed under other registries except VCS. Similar exercise of independently searching for such project registration or claim for current monitoring period was performed for other GHG related benefits such as REC /16/ and I-REC /17/ benefits and based on both independent assessment and declaration submitted by PP /28/.

Assessment team has also verified the issuance of VCUs claimed in previous verification against the VCU issuance record registry. Thus, ensuring emission reduction generated from the project activity will not be double counted hence accepted by the assessment team.

The details of the registries checked are as follows:

1. <https://www.recregistryindia.nic.in/>
2. <http://cdm.unfccc.int/>
3. <http://www.goldstandard.org/>
4. <https://www.ucarbonregistry.io/>
5. <https://projects.globalcarboncouncil.com/>
6. <https://www.irecstandard.org/registries/>

Rejection by other GHG programs

The Project is not rejected by other GHG programs. A declaration /28/ 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, description, monitoring report and found that no such project either exists or were rejected by the registries. The details of the registries checked are as follows:

1. <https://www.recregistryindia.nic.in/>
2. <http://cdm.unfccc.int/>
3. <http://www.goldstandard.org/>
4. <https://www.ucarbonregistry.io/>
5. <https://projects.globalcarboncouncil.com/>

³ <https://registry.verra.org/app/projectDetail/VCS/1788>

[6.https://www.irecstandard.org/registries/](https://www.irecstandard.org/registries/)

3.2 Methodology Deviations

During the current monitoring period, no methodology deviation was observed and even during the previous verification /4/ no methodology deviations were observed.

3.3 Project Description Deviations

During the current monitoring period from 01-January-2021 to 31-December-2022 (inclusive of both the dates), a Project Description deviation is requested by PP.

Deviation-

During Site Visit it was observed via JMRs that the formula mentioned in the registered PD for the quantity of net electricity generation supplied by the project activity to the grid was inconsistent from the formula actually used for calculation onsite.

Net electricity generation-

Net Electricity = Export – Import (**earlier used formula**)

As confirmed from personnel interviews/32/ Net electricity supplied is calculated based on the difference between the calculated values of "export", "import" and "transmission loss" on the EB (Electricity Board) energy meters and at the substation". Transmission loss is calculated on a pro-rata basis as per the readings of the 220KV substation and "primary metering Point".

Formula used as per the JMR in the current monitoring period to follow a more conservative approach-

Net Electricity = Export – Import – Transmission Loss

The net electricity is calculated by the state electricity board and provided in the monthly generation statement (JMR). Hence, the net electricity reading is directly sourced from the monthly generation statement/JMRs/26/ which is in line with the actual monitoring process

Furthermore, it was observed via commissioning certificates /29/, PPA /22/ and personnel interviews /32/ that the total capacity of the plant is 104.5 MW and registered capacity of project is 102.5. The apportioning is taken as the monthly generated JMR is for capacity of 104.5 MW but the actual registered capacity is 102.5 MW. This correction is considered a project deviation for the current monitoring period.

The apportioned generation from the individual WTGs (50WTGs) for project activity (102.5 MW) has been used for ER calculation using following formula:

$$\text{Net electricity exported to the grid} = \frac{\text{Net electricity as per registered capacity of PDD}}{\text{Net electricity as per total capacity}}$$

The apportioned value of 0.98086 obtained from the above formula has been used to calculate the net electricity generation as mentioned in MR /1/ and ER Sheet /2/.

As per the assessment team, the deviation taken is in line with the guidelines provided in VCS Standard Version 4.5 /7/ Section 3.21; it doesn't impact existing applicability conditions, methodology, baseline, and additionality.

3.4 Grouped Project

As per VCS Joint PD & MR version 03 dated 16-November-2018, the project is not a grouped project. This can further be confirmed as per para 3.5.7 of VCS Standard V 4.5 /7/. Therefore, this section is not applicable.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

During the onsite audit with PP representative, it was concluded that the implemented project is as per the requirement of the registered VCS Joint PD & MR/3/ and approved monitoring plan. This project activity involves the installation of Wind project and consist of 102.5 MW in which 50 (2 MW*25 and 2.1*25 MW) WTGS manufactured by M/s. Gamesa and Suzlon has been implemented at Anantapuram district of Andhra Pradesh. The project is promoted by Saipuram Wind Energies Private Limited which is part of Greenko Group and O&M is also done by Greenko. A total of 06 dedicated Feeders are Present in the substation and the energy generation is measured in respective feeder by use of Tri vector meters. Internal available automatic metering system recently installed.

The details are feeders are connected WTGs are as follows:

Feeder Number	WTG number
1	WTG-16A, WTG-017, WTG-018, WTG-019, WTG-037, WTG-036, WTG-044, WTG-030, WTG-031, WTG-032
2	WTG-021, WTG-21A, WTG-026, WTG-029, WTG-038, WTG-039, WTG-040, WTG-27
3	WTG-010, WTG-012, WTG-013, WTG-014, WTG-022, WTG-023, WTG-025, WTG-26A, WTG-049, WTG-050
4	WTG-007, WTG-09A, WTG-09B, WTG-09C, WTG-011, WTG-25A, WTG-19A

5	WTG-004, WTG-005, WTG-006, WTG-008, WTG-009, WTG-015, WTG-016
6	WTG-001, WTG-002, WTG-003, WTG-041, WTG-042, WTG-043, WTG-045, WTG-046

The Voltage generated at the generator is 690 V and it is stepped up to 33 kV voltage and the same is connected to PSS. From PSS again, the 33 kV is stepped up to 220 kV and synchronized to the grid. ABT meters are available on 220kV side in PSS for Billing purpose.

During the current monitoring period, it was observed **through breakdown log sheet records/34/** present on site and also provided by PP as soft copy to the VVB where it was verified that the plant underwent breakdown through various reasons like- Pitch Motor Brake1 Malfunction, Manual stop for tower torquing, Pitch Freq Conv Pitch1 Error stop, DFIG Inverter Fault Shutdown, Low level hydraulic group refrigeration oil, etc. In the current monitoring period it was observed that, all the WTGs are active. The breakdown that occurred was for a **total of 0.57% of total hours of all the WTGs**. Other than that, the project underwent continuous operation and only scheduled maintenance took place as per the manufacturer's specification /30/ which is acceptable to the assessment team as verified during the interview with PP personnel /32/ Senior engineers/Junior engineer/Assistant manager present at site during onsite visit/33/.

Table No 8: Breakdown Hours for the current Monitoring Period (01-January-2021 to 31-December-2022)

S. No.	Plant Site	Total Hours	Net Operational Hours	Breakdown hours
1.	Wind Site	876,000 hours ⁴	871,092 hours 08 minutes/ 99.43 % of total hours	4908 hours 52 minutes/ 0.57% of total hours

Project location is confirmed by the assessment team through the GPS Google software /19/ during desk review and site visit as well via GPS Map Camera/18/. Moreover, assessment team confirm that the latitudes and longitudes as mentioned in the registered VCS Joint PD & MR /3/ are correct.

Table No 9: The WTG wise latitudes and longitudes are confirmed below:

S. No	WTG No	Commissioning date	Longitude (E)	Latitude (N)
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⁴ Total Hours = 17520*Number of WTGs (i.e., 50). So, 17520* 50=876,000

1	WTG-001	31-March-2017	77° 14'36.3"	14° 30'6.3"
2	WTG-002	31-March-2017	77° 14'37.1"	14° 30'19.2"
3	WTG-003	31-March-2017	77° 14'38.2"	14° 30'32.9"
4	WTG-004	31-March-2017	77° 14'13.1"	14° 30'48.1"
5	WTG-005	31-March-2017	77° 14'1.7"	14° 30'57.3"
6	WTG-006	31-March-2017	77° 14'7.2"	14° 31'6.9"
7	WTG-008	31-March-2017	77° 14'36.3"	14° 31'50"
8	WTG-009	31-March-2017	77° 14'34.7"	14° 32'0.6"
9	WTG-010	31-March-2017	77° 12'59"	14° 31'27.7"
10	WTG-012	31-March-2017	77° 12'30.93"	14° 31'21.7"
11	WTG-013	31-March-2017	77° 12'31.6"	14° 31'34.3"
12	WTG-014	31-March-2017	77° 12'38.6"	14° 30'55.5"
13	WTG-015	31-March-2017	77° 12'39.3"	14° 30'42.7"
14	WTG-016	31-March-2017	77° 13'2.9"	14° 30'27.9"
15	WTG-022	31-March-2017	77° 11'56.4"	14° 31'37.7"
16	WTG-023	31-March-2017	77° 11'49.2"	14° 31'53"
17	WTG-025	31-March-2017	77° 10'53.9"	14° 32'10.4"
18	WTG-26A	31-March-2017	77° 9'58.6"	14° 32'3.6"
19	WTG-041	31-March-2017	77° 15'40.7"	14° 30'54.4"
20	WTG-042	31-March-2017	77° 15'39.6"	14° 31'7.2"
21	WTG-043	31-March-2017	77° 15'42.8"	14° 31'19.5"
22	WTG-045	31-March-2017	77° 14'40.2"	14° 29'32.7"
23	WTG-046	31-March-2017	77° 15'25.2"	14° 29'20.6"
24	WTG-049	31-March-2017	77° 13'16.1"	14° 31'43.7"
25	WTG-050	31-March-2017	77° 13'15.6"	14° 31'56.9"
26	WTG-007	31-March-2017	77° 13'46.2"	14° 31'20.6"
27	WTG-09A	31-March-2017	77° 15'24.2"	14° 32'14.1"
28	WTG-09B	31-March-2017	77° 15'19.6"	14° 32'24.5"
29	WTG-09C	31-March-2017	77° 15'15"	14° 32'36"
30	WTG-011	31-March-2017	77° 13'8.5"	14° 31'10.7"
31	WTG-16A	31-March-2017	77° 13'7.8"	14° 30'6.4"
32	WTG-017	31-March-2017	77° 13'0.3"	14° 29'55.8"
33	WTG-018	31-March-2017	77° 13'3.9"	14° 29'43.2"
34	WTG-019	31-March-2017	77° 13'8.8"	14° 29'31.6"
35	WTG-037	31-March-2017	77° 9'37.52"	14° 30'37.69"
36	WTG-036	31-March-2017	77° 11'34.1"	14° 30'58.1"
37	WTG-044	31-March-2017	77° 10'55.0"	14° 30'46.1"
38	WTG-021	31-March-2017	77° 11'34.3"	14° 31'22.9"
39	WTG-21A	31-March-2017	77° 11'45.01"	14° 31'17.07"

40	WTG-024	31-March-2017	77°12'13.7"	14°32'17.6"
41	WTG-026	31-March-2017	77°10'1.80"	14°32'13.6"
42	WTG-029	31-March-2017	77°10'52.31"	14°31'17.6"
43	WTG-030	31-March-2017	77°9'15.44"	14°29'55.43"
44	WTG-031	31-March-2017	77°9'20.3"	14°30'5.4"
45	WTG-032	31-March-2017	77°9'36.13"	14°30'20.3"
46	WTG-038	31-March-2017	77°9'8.5"	14°31'44.9"
47	WTG-039	31-March-2017	77°10'51.4"	14°31'38.7"
48	WTG-040	31-March-2017	77°10'7.1"	14°31'33.16"
49	WTG-19A	31-March-2017	77°13'23.66"	14°32'4.86"
50	WTG-25A	31-March-2017	77°11'16.5"	14°32'22.07"

Starting date of the operation of the project activity is **31-March-2017** which is the date of interconnection with the grid. Assessment team checked the commissioning certificate and confirmed that the dates of Commission for WTGs are correct. Assessment team also confirm during the onsite audit /33/ that there is no change in project design and the project is implemented as per the description provided in the registered VCS Joint PD & MR /3/. This has been further verified from the previous verification report /4/.

Table No 10: Commissioning dates for project activity are given below:

Project (Wind)	Promoters	Installed Capacity	WTGs	Commissioning Date	Means of Verification
Saipuram Wind Energies Limited	Private	102.5 MW	50	31-March-2017	Commissioning Certificates

Project Title	Renewable Power Project by Saipuram Wind Energies Private Limited
Date of Commissioning	31-March-2017

Project Type	Wind Project
Capacity	102.5 MW
Location	Village- Rudrampalli, Borampalli, Elagalavanka & Basavapuram, District- Anantapuram, State- Andhra Pradesh
Host Country	India

The technical parameters have been verified with the name plates as well as with the technical specifications/30/ of WTGs and also cross checked from the technical manual of the Manufacturer. Assessment team confirms that the technical parameters are consistent with the registered VCS Joint PD & MR /3/ and previous verification report /4/. The major technical specifications of the WTGs are as follows:

The technical specification for 102.5 MW (25 * 2 MW and 25*2.1MW) Wind project is provided below.

Table No 11: The technical details of the WTGs are as follows:

Technical specifications of WTGs	
WTG Make and Model No.	Gamesa G97 ⁵
Total number of WTGs	25 (2.0MW)
Generator Type & Rating	Doubly-Fed Induction generator, 2000 kW
WTG configuration	2000 kW
Rotor Diameter	97 m
Hub Height	90
Tower Type & Shape	Conical Tubular Steel
Cut-in-wind speed	3.0 m/s
Rated wind speed	11.0 m/s
Cut-out wind speed	25.0 m/s

WTG Make and Model No.	Suzlon S97
Total number of WTGs	25 (2.1 MW)
WTG configuration	2100 kW
Rotor Diameter	97 m
Hub Height	90
Tower Type	Tubular Steel
Cut-in-wind speed	3.5 m/s
Rated wind speed	11.0 m/s
Cut-out wind speed	20.0 m/s

⁵ <https://en.wind-turbine-models.com/turbines/764-gamesa-g97>

Technical specification of Transformers (SGRE)	
Make	ABB
Voltage	33KV/690 V
Rated Power	2350 KVA
Technical specification of Transformers (Suzlon WTG)	
Make	ABB
Voltage	33KV/690 V
Rated Power	2330 KVA
Technical specifications Power Transformers	
Make	Prime Meiden
Voltage	220/33kV
Rated Power	1 X 80/100/110 MVA

The assessment team confirmed through onsite visit /33/ that the monitoring plan was implemented as per the registered VCS Joint PD & MR /3/ and applied methodology ACM0002, Version 18.1 /11/. The organizational role and responsibility as mentioned in the registered VCS Joint PD& MR /3/ is followed onsite. Meters are calibrated as per calibration frequency in registered VCS Joint PD& MR /3/.

Assessment team concludes the following:

- a) There was one deviation between project implementation and the project description provided in the registered VCS Joint PD& MR /3/ that is related to the JMR /26/ (Transmission loss calculation and Mismatch in the total plant capacity and registered project capacity) that was resolved by the PP.
- b) The monitoring plan is implemented completely and monitoring system (i.e., process and schedule for obtaining, recording, compiling and analysing the monitored data and parameters) is appropriate.
- c) There are no material discrepancies between the actual monitoring system, and the monitoring plan set out in the project description and the applied methodology /11/.
- d) 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 /28/.
- e) The project has not received or sought any other form of environmental credit, or has become eligible to do so since validation /5/ or previous verification /4/.
- f) The project is registered under VCS; and, PP has submitted the declaration stating /28/, they are not claiming same GHG emission reductions of the project from any other GHG program for the current monitoring period when project is seeking to get GHG emission reduction from VCS. Audit team also checked the REC mechanism which was verified from the REC website Renewable Energy Certificate Registry of India ([Renewable Energy Certificate Registry of INDIA - Registered RE Generator List \(recregistryindia.nic.in\)](http://recregistryindia.nic.in)) /16/
- g) The project activity complies with indicators for sustainable development in the interim approval guidelines for Clean Development Mechanism (CDM) projects from India as

discussed under section 1.11 of MR /1/. Assessment team has verified the same during on site visit /33/ and found all the indicators to be effective and applicable for the project activity.

- h) According to VCS Standard 4.5/7/, specific guidelines are applicable when the producer(s) or retailer(s) of the impacted good or service are identified but not involved in the project or do not possess a website. The project activity is a 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.
- i) As per the VCS Standard Version 4.5/7/, projects registered on or after 20-January-2023, must demonstrate contributions to a minimum of three Sustainable Development Goals (SDGs). Projects registered with VERRA before this date must show contributions to three SDGs by 20-January-2025⁶, as stated in the Quarter 1 VCS Program Update released on 20-January-2022.

This is project's fourth Periodic Verification for the Monitoring Period from 01-January-2021 to 31-December-2022 (Inclusive of both the dates) is registered before 20-January-2023, so the Project Proponent (PP) must demonstrate contributions to at least three SDGs by 20-January-2025. For the current monitoring period, the PP is voluntarily showing contributions to two SDGs, as indicated below:

- **7.2 i.e. (Renewable energy share in the total final energy consumption)** In this monitoring period about- 377,929.11 MWh renewable electricity has been supplied to Indian National grid that helps to increase the renewable energy share in the energy mix.
- **13.0 i.e. (Tonnes of greenhouse gas emissions avoided or removed)-** In this monitoring period release of about- 358,087 tCO₂e was prevented into the atmosphere

Table No 12: Audit History Table:

Audit Type	Monitoring Period	Program	VVB Name	Number of years	Conclusion
Validation+ Verification	(31-March-2017 to 03-August-2018) (Inclusive of both the dates)	VCS	LGAI Technological Center S. A.	01 Year 04 months 05 days	VKU's assessment team has cross verified the emission reductions reported in the monitoring report for MP 1 along with the Joint

⁶ <https://verra.org/wp-content/uploads/2022/01/VCS-Summary-of-Effective-Dates-2022-01.pdf>

					Validation and Verification report for MP 1 and VCU's issued were cross verified from the VCU's issuance record link available on the project webpage /15/.
Verification	(4-August-2018 to 03-October-2019) (Inclusive of both the dates)	VCS	Earthood Services Private Limited	01 Year 02 months 00 days	VKU's assessment team has cross verified the emission reductions reported in the monitoring report for MP 2 along with the verification report for MP 2 and VCU's issued were cross verified from the VCU's issuance record link available on the project webpage /15/.
Verification	(04-October-2019 to 31-December-2020) (Inclusive of both the dates).	VCS	TÜV SÜD South Asia Pvt Ltd	01 Year 02 months 28 days	VKU's assessment team has cross verified the emission reductions reported in the monitoring report for MP 3 along with the verification report for MP 3 and VCU's issued were

					cross verified from the VCU's issuance record link available on the project webpage /15/.
Total	30-March-2017 to 31-December-2020 (Inclusive of both the dates)	VCS	N/A	03 Years 09 months 02 days	The Total emission reduction until the current monitoring period is verified by VKU's Assessment team from VERRA webpage /15/.
Verification	01-January -2021 to 31-December-2022 (On going) (Inclusive of both the dates)	VCS	VKU Certification Pvt. Ltd.	02 Year 00 months 00 days	VKU assessment team conducted the verification for current monitoring period (4 MP) and verified the emission reductions reported in the ER Sheet and MR via supporting documents.

In view of the information's as verified above the assessment team is able to conclude that the project has been implemented as described in the project description, All the above stated information was verified by VVB during onsite visit /33/ and onsite personnel interviews /32/.

4.2 Safeguards

4.2.1 No Net Harm

As mentioned in MR/1/ the project activity does not involve any major construction activity. It primarily requires the installation of the WTGs, interfacing the generators with the State Electricity Board by setting up HT transmission lines and installation of other accessories.

The report on "Developmental Impacts and Sustainable Governance Aspects of Renewable Energy Projects" prepared by MNRE dated September 2013. This report clearly mentioned that

wind power project activity operations do not result in direct air pollution, noise pollution. Please refer below web link for the same⁷.

Thus, there are no significant impacts due to implementation of project activity on air, water, soil quality and ambience are envisaged due to the project activity.

VVB has assessed the project activity on site and confirms that there were no negative environmental and socioeconomic impacts observed during current monitoring period as all necessary measures were found in place which was confirmed during site visit /33/.

4.2.2 Local Stakeholder Consultation

The Project is already registered with VCS and registered VCS Joint PD & MR /3/ section 2.2 describe the Local Stakeholder Consultation Process as in-line with VCS requirement.

The details of the Stakeholder Meetings as per the registered PD are as follows:

Date of invitation – 11-July-2016

Date of Meeting – 18-July-2016

Location of Meeting - Project site, Andhra Pradesh

Stakeholders were briefed about the climate mitigation project activity and were explained about the electricity generation from wind project being an environmental friendly power generation technology contributing to reduction in GHG emissions. They were also explained about the benefits of the wind power projects like, increasing energy availability and improving quality of power and its assistance to the local population by providing employment opportunities to both skilled & unskilled labours.

As a part of continual improvement process, a dedicated Visitor register cum grievance register /31/ has been placed at the project site which is accessible to stakeholders to provide their feedback on the project. It is placed appropriately at a publicly accessible location where local stakeholders can provide their feedback on the project. This location is also conducive to continuous and regular checks for stakeholder comments. The stakeholders are requested to share their experiences and grievances on continuous basis. PP has explained this mechanism for on- going communication to the local stakeholders and transparently kept the notice mentioning the grievance register at the project site. During the current monitoring period, positive feedbacks has been received regarding site operation.

⁷ <http://164.100.94.214/sites/default/files/uploads/report-on-developmental-impacts-of-RE.pdf>

There were no additional significant objections or comments made by the stakeholders as part of ongoing feedback as verified onsite from the suggestion box and feedback form present.

The verification team has interacted with local stakeholders during on-site assessment /33/ and details are summarized in [section 2.3](#) of this report. The verification team also verified the grievance register /31/ and conducted the personnel interviews /32/ to conclude the on-going stakeholders process conducted and no negative comments were observed for the project activity.

4.3 AFOLU-Specific Safeguards

As the project comes under the category of NON-AFOLU projects therefore this section does not apply for this verification. Hence Not Applicable.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The project monitoring has been carried in accordance with the registered VCS Joint PD & MR /3/ and the monitoring report /1/. The monitoring plan laid in the registered VCS Joint PD & MR /3/ is being followed at the site/33/ and involves just one parameter to be monitored $EG_{PJ,y}$ (Quantity of net electricity generation supplied by the project plant/unit to the grid during this monitoring period) according to the registered monitoring plan mentioned in the monitoring report/1/ and VCS Joint PD & MR/3/. The parameter value is sourced from JMRs /26/. The import and export value, which is recorded monthly in JMRs, is properly monitored by installed, calibrated metres of 0.2s accuracy class. The verification team has carefully analysed ER sheet /2/ that was provided by PP by cross-checking the values from the JMRs and Invoices that PP submitted and it has determined that all of the equations, conversions, and aggregations are correct. The estimated emission reduction was 532,574 tCO₂e for current monitoring period i.e., 01-January-2021 to 31-December-2022 whereas the actual emission reductions achieved were 358,087 tCO₂e which is 32.76% lower than what was anticipated. This is due to the lower PLF i.e., 21.05% observed in this monitoring period because of lesser wind velocity at the site which is not in the control of the project proponent.

Table No. 13- PLF Analysis: -

Estimated PLF as per registered VCS Joint PD & MR		31.30%
Current monitoring period		Actual Generation (MWh)
Total no. of days		730
01-January-2021	31-Dececeber-2022	
Total generation		358,087
Capacity		102.5 MW
Actual PLF		21.05%

The assessment team has verified the information flow (from data generation, aggregation, to recording, calculation and reporting for these parameters including the values) in the MR /1/.

The emission reductions are purely based on the net electricity generated and exported from the WTGs.

PP has provided all the sufficient data for 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 ER spreadsheet /2/ provided by PP. The verification of each monitoring parameter has been discussed later in section 4.5.

In section 4.5 of this report and section 5.4 of MR /1/ calculations have been stated which can be further compiled in ER /2/ that has been verified by the assessment team from JMRs issued to PP by State utility and further cross verified from the daily generation report available on the site/8/submitted to assessment team by PP. Hence VKU states that the calculation method and formulae used in calculating baseline emission is in compliance to the methodology used /11/. The calculation method and formulae used in calculating baseline emission is in compliance to the **Methodology used i.e., ACM0002 Version 18.1** /11/. Since project activity is a wind power project, leakage emission and project emission have been considered as zero.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

During the verification, all relevant documents were checked to assess the correctness and quality of data submitted by the project participants, which are used to determine emission reductions.

All records needed for monitoring are archived in line with the requirements of the registered monitoring plan. No significant, lack of evidence and missing data were detected during verification. Hence, the verification team confirms that the monitoring system ensures required quality of the monitoring system to ensure the quality of the monitored data. All internal data are subjected to QA/QC measures.

The only monitoring parameter in the project activity is “Quantity of net electricity supplied to the grid as a result of the implementation of the VCS project activity in year y, **EG_{PJ, y}** (MWh). This parameter is monitored through controlled reading of meters of each WTG and the reading of bulk energy meters installed at substation.

Table No 14: Metering Voltage and Evacuation at Plant Site

S.No.	Plant Site	Metering Voltage at Plant Site	Evacuation at Substation
1.	Saipuram Wind Private Energies Limited	33 kV	220 kV (The nearest WTG-15 is at distance of approx. 0.2 km, and the longest distance of WTG-43 is at distance of approx. 9.08 km)

The below tables describe how the parameter $EG_{PJ,y}$, 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 15: Assessment of Parameter $EG_{PJ,y}$ (net electricity supplied by the project (wind) plant/unit to the grid during the monitoring period)

Parameter	Quantity of net electricity supplied by the project (wind) plant/unit to the grid during the monitoring period, $EG_{PJ,y}$ (MWh)	
Means of verification	Criteria/Requirements	Assessment/Observation
	Measuring /Reading /Recording frequency	Continuous monitoring, and at least monthly recording for net electricity generation. The net generated electricity supplied to the grid is determined through SEB energy meter installed at delivery points (i.e., the connected sub-station). Wind: - Net electricity generated and supplied by the project plant/unit to the grid = Export – Import – Transmission loss. 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 the registered VCS Joint PD & MR/3/ and monitoring methodology /11/. This was verified by assessment team during desk review and by Team Leader during onsite visit /33/ and interviews with site personnel. /32/.

	Monitoring equipment	Tri-vector Meter⁸ Wind: - Project- Saipuram Wind Energies Private Limited Meter and Calibration details of 102.5 MW Wind power project by Saipuram Wind Energies Private Limited: 102.5 MW - 220 KV <table><tr><th>Meter Details</th><th>Main Meter</th><th>Check Meter</th><th>Standby Meter</th></tr><tr><td>Meter Serial No</td><td>0018054216</td><td>0016196382</td><td>0016196426</td></tr></table> Data type: Measured & Calculated Type of meter: Static type meter (Main, Check & Standby). Make- L&T Accuracy Class of meter: 0.2s	Meter Details	Main Meter	Check Meter	Standby Meter	Meter Serial No	0018054216	0016196382	0016196426
	Meter Details	Main Meter	Check Meter	Standby Meter						
Meter Serial No	0018054216	0016196382	0016196426							
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	Yes. The accuracy of monitoring equipment is 0.2s valid for the entire range which is as per the registered VCS Joint PD & MR/3/ and it is consistent as per the PPA/22/. At the time of desk review, it was observed that the error percentage ranges from 0.008% to 0.077% during calibration which is lower than the accuracy class i.e.- 0.2%. Hence Accepted.									

⁸ During Site visit it was observed that meters were changed in May 2023 but the dates of meter change does not fall under current monitoring period (i.e., from 01-January-2021 to 31-December-2022). Hence, Assessment team cross verified the serial no. of the old meters mentioned in MR via calibration certificates and JMRs and it was found to be correct.

	manufacturer's specification?	
	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's is valid for the entire range (0.03s to 0.2s) which is as per registered VCS Joint PD & MR /3/. This was assessed by checking the calibration certificate of the energy meters /24/. Thus, the assessment team based on the calibration certificates /24/ states that the accuracy is valid for the entire measuring range. The calibration was carried out by Yathva Energy Solutions Private Limited which is NABL accredited laboratory (Lab ID- T-2029, Certificate Number- TC-5881- valid from 09-July-2023 to 08-July-2025) and test is witnessed by APTRANSCO (Transmission Corporation of Andhra Pradesh) officials. The calibration is carried out as per the PPA norms /22/, moreover it is beyond the control of PP. The government agency itself acts as a third party for the PP to witness the calibration conducted. Hence, assessment team accepted the calibration certificates /24/ submitted by the PP issued by Yathva Energy Solutions Private Limited which mentioned the accuracy is within the entire measuring range.
	Calibration frequency /interval:	Calibration frequency of the energy meters is once in 5 years as per the <u>CEA guidelines 17- March- 2006</u> mentioned in registered monitoring plan in VCS Joint PD & MR /3/.
	Is the calibration interval in line with the monitoring plan and/or	Yes. The calibration frequency is once in 5 years as outlined in the registered VCS Joint PD & MR /3/ is in accordance with

	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?	the national standards /21/ i.e Clause 18 of <u>Central Electricity Authority</u> (Installation and Operation of Meters ⁹). This was also confirmed during interview with onsite personnel /32/, which is in line with VCS Standard version 4.5 /7/ calibrations requirements as well as per the registered monitoring plan.
	Is the calibration of measuring equipment carried out by an accredited person or institution?	Yes. Calibration of the measuring equipment's is carried out was carried out by Yathva Energy Solutions Private Limited which is NABL accredited laboratory and test is witnessed by APTRANSCO (Transmission Corporation of Andhra Pradesh) officials which is a government agency itself this was verified during onsite personnel interviews /32/. In accordance with the emergency procedure outlined in the MR/1/and cross verified via personnel interviews /32/, If an error is found in both meters (Main and Check) to be beyond the permissible limits, then standby meter will be used which is calibrated in the same manner as main and check meters.
	Is(are) calibration(s) valid for the whole reporting period?	Yes. Calibration of energy meters /24/ is valid for the current monitoring period for the project activity and it was checked from the calibration certificates provided by the PP and the calibration details are mentioned in Table 18 of this section

⁹ Regulations Notified on 17-March-2006 No. 502/70/CEA/DP&D Amendments Notified on 26-June-2010 No. 502/6/2009/DP&D/D-I

		and is found to be in line with the calibration certificates. Hence Accepted.
	Is the calibration carried out for a measuring range comparable with the range for which measurements have been carried out?	Yes. As per the calibration certificates, error variation observed is lesser than the error variation specified. Hence, it is within the measurable range. The calibration is carried out appropriately as per the registered monitoring plan and VCS standard version 4.5/7/. The calibration is carried out appropriately by The calibration was carried out by Yathva Energy Solutions Private Limited which is NABL accredited laboratory and test is witnessed by APTRANSCO (Transmission Corporation of Andhra Pradesh) officials.
	How were the values in the monitoring report verified?	Cumulative value of $EG_{PJ,y}$ for entire monitoring period is reported in the monitoring report /1/, and monthly values in the ER calculation sheet /2/. The monthly values were verified from the JMRs /26/ issued by state utility and found to be consistent. Value of this parameter for the current monitoring period was verified as 377,929.11 MWh.
	If applicable, has the reported data been cross-checked with other available data?	The monthly reported values of $EG_{PJ,y}$ is recorded in an ER Sheet /2/ and were further cross checked with the daily generation report and cross verified from the monthly JMRs /26/ raised by state utility to PP and was found to be consistent.
	Does the data management ensure correct transfer of data and reporting of emission reductions and	On site personnel interview /32/ with the project stakeholder of the project activity confirms that the necessary QA/QC procedures are in place and the data management system is effective and

	are necessary QA/QC processes in place?	reliable. The meters are tested and sealed and remains under the custody of state utility itself and calibration is undertaken at required intervals and hence it is concluded that the data management system is effective and reliable. The export and import are measured continuously using Main and Check meters located at the substation. Readings of meters are taken on monthly basis by authorized officer of SEB in the presence of PP or representative of PP. Based on the Meter Reading Statement/JMRs /26/ issued by the state utility invoices /27/ are raised by PP. These JMRs are further used to collect data for ER calculations and it is crosschecked via invoices. The desk review of O&M agreement /23/ and register monitoring plan and its implementation in the current monitoring period is done to satisfactorily verify that the system is in place.
	In case project participants have temporarily not monitored the parameter, has either i.e) a deviation been approved by the CDM EB or ii) has the parameter been estimated as stipulated by Appendix 1 to the CDM Project Standard?	No such issues.
Findings	CAR#01 was raised and resolved.	
Conclusion	The parameter has been verified appropriately, in accordance with the registered 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 WTGs. Since 100% data was verified, the team can ascertain that the values taken for emission reduction calculation are free from material errors and materiality threshold is within the limits of the project scale i.e., 5%.
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Table No 16: Parameters fixed ex ante:

Parameter	Unit	Description	Value
EFgrid,OM,y	tCO ₂ /MWh	Operating margin CO ₂ emission factor of INDIAN Grid	0.9726 is consistent with the registered VCS Joint PD & MR version 03 dated 16-November-2018 /3/ <u>Calculated from CEA database, Version 13, June 2018 /21/</u>
EFgrid,BM,y;	tCO ₂ /MWh	Build margin CO ₂ emission factor of INDIAN grid	0.8723 is consistent with the registered VCS Joint PD & MR version 03 dated 16-November-2018 /3/ <u>Calculated from CEA database, Version 13, June 2018/21/</u>
EFgrid,CM,y	tCO ₂ /MWh	Combined margin CO ₂ emission factor of INDIAN grid	0.9475 is consistent with the registered VCS Joint PD & MR version 03 dated 16-November-2018 /3/ The date has been considered in accordance to the “Tool to calculate emission factor of an electricity system”. The Central Electricity Authority (CEA) has provided estimates for the simple operating margin

			and build margin emission factors for the regional grids. In order to calculate the CO ₂ emission factor using the combined margin method for the second crediting period, weights of 0.75 for operating margin and 0.25 for build margin for the Indian grid are considered, as per the 'Tool to calculate the emission factor for an electricity system' (Version 07.0).
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Calibration of meters /24/: During the verification assessment of the project activity, accuracy of all the metering equipment have been checked and found appropriate. The installation and working conditions of the meters were checked during the site inspection and were found to be satisfactory. Details of meters are provided in below table:

Meter and Calibration details for Renewable Power Project by Saipuram Wind Energies Private Limited are as follows-

Table No 17: Calibration Details:

Meter and Calibration details of 102.5 MW Wind power project by Saipuram Wind Energies Private Limited:			
Meter Details	Main Meter	Check Meter	Standby Meter
Meter Serial No	0018054216	0016196382	0016196426
Meter Make	L & T	L & T	L & T
Accuracy Class	0.2s	0.2s	0.2s
Date of Calibration 2021	17-November-2021	17-November-2021	17-November-2021
Due Date of Calibration	16-November-2026	16-November-2026	16-November-2026

The energy meter calibration certificates /24/ are checked and found that the calibration details provided in the MR /1/ are correct. From the verification of above table, verification team also confirms that the energy meter calibrations are valid for the complete monitoring period i.e., from 01-January-2021 to 31-December-2022 (inclusive of both the dates).

The verification team has checked all the meters and confirmed that the meters were working satisfactorily. Also, the calibration of meters is completely under purview of state utility and PP

has no control over the same as confirmed through interviews of site personnel and PPA signed by the PP with state utility /22/.

Hence it can be concluded that the approach followed by the PP is conservative and in line with the guidelines provided under paragraph 3.4.2 of VCS Validation and Verification manual version 3.2/8/

The registered VCS Joint PD & MR/3/ & MR/1/ and site audit observations confirm that the metering equipment are sealed and maintained by the state utility.

The assessment team has verified the monthly JMRs issued by the state utility Andhra Pradesh power transmission corporation limited and confirmed that only the data recorded through main meters is used to calculate net electricity supplied to the grid consequently for ER calculations recorded in ER sheet/2/.

In view of the above discussion the assessment team is able to confirm that evidence used to determine the GHG reductions and removals are sufficient and appropriate with respect to quality and quantity.

GHG Calculations:

The emission reduction as per the applied methodology equals the baseline emissions (project emissions and leakage emissions for such project activities is considered zero). The formula provided for the calculation of baseline emissions is:

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

Where:

BE_y : Baseline emissions in year y (tCO₂e/yr)

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

$EF_{grid,CM,y}$: Combined margin CO₂emission 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” (tCO₂e/MWh)

Table No 19: Calculations

Parameter	Unit	Value
EG PJ, y	MWh	377,929.11
EF grid,CM,y	tCO ₂ e	0.9475
BE _y	=	377,929.11 *0.9475
	=	358,087 (Round down value)

The verification team attests to the correctness of the formulas and methodologies used to compute baseline emissions as per Para 42-page no. 33 of the Baseline and Monitoring Methodology ACM0002 “Grid Connected Renewable Electricity Generation from renewable sources” Version 18.1 /11/. The applied default values, emission factors, and assumptions in the calculations are all reasonable.

The assumptions, emission factors and default values that were applied in the calculations are justified. The estimated emission reduction for the current monitoring period 01-January-2021 to 31-December-2022 was 532,574 tCO₂e but the actual emissions achieved is 358,087 tCO₂e. The actual emission reduction achieved during current monitoring period is 32.76% lower than the estimated value. We as VVB accepted this as this is mainly due to the low PLF observed and breakdown that occurred due to certain reasons like-

1. Pitch Motor Brake1 Malfunction
2. Manual stop for tower torquing
3. Pitch Freq Conv Pitch1 Error stop
4. DFIG Inverter Fault Shutdown
5. Low level hydraulic group refrigeration oil

However as mentioned in Breakdown details given by the PP/34/, the breakdown that took place during the current monitoring period was for a total 0.57% of total operational hours.

All the data were made available and have been monitored as per required monitoring frequency. The means of verification for the values of parameters, used for baseline emission calculation, is described above.

VKU is of the opinion that this method of calculation of emission reductions is accurate and results in conservative estimation of emission reduction and is in line with the applicable VCS requirements set out in section 3.15 of VCS Standard version 4.5/7/ and that the verification of the GHG statement was conducted in accordance with ISO 14064-3; 2019.

4.6 Non-Permanence Risk Analysis

Since this is a Non-AFOLU projects there is no non-permanence risk that could lead to material errors, omissions or misstatements rating determined by the project proponent for the project activity and no risk was identified in the audit/verification plan hence not applicable.

5 VERIFICATION OPINION

VKU Certification Pvt. Ltd. has performed the fourth verification of the first renewable crediting period 31-March-2017 to 30-March-2027 (inclusive of both the dates) reported for the project activity “Renewable Power Project by Saipuram Wind Energies Private Limited”. VCS Registry Project ID 1788, for the period 01-January-2021 to 31-December-2022 (inclusive of both the

dates), with regard to the relevant requirements for VCS activities. As described in the report from section 1 to 4, VKU has performed the entire verification according to the verification criteria for projects and their GHG emission reductions or removals set out in VCS standard Version 4.5 /7/. The project participants of the “Renewable Power Project by Saipuram Wind Energies Private Limited” are responsible for:

- The preparation of greenhouses gas emissions data and the reported greenhouse gas emission reductions from the project on the basis set out in the monitoring plan contained in the registered VCS Joint PD & MR /3/ version 03 of 16-November-2018.
- The development and maintenance of records and reporting procedures in accordance with that plan, including the calculation and determination of greenhouse gas emission reductions of the project.

It is the responsibility of VKU to express an independent verification opinion about the project’s conformity with the requirements of VCS Standard version 4.5/7/ and GHG program applied, on the reported greenhouse gas emission reductions from the project.

Based on documented evidence and corroborated by an on-site assessment, VKU can confirm:

- The project has been implemented and operated as per the registered VCS Joint PD & MR /3/.
- The monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS Standard version 4.5/7/ requirements;
- The monitoring is in place as per the applied baseline and monitoring methodology
- The monitoring plan in the registered VCS Joint PD & MR/3/ is as per the applied baseline and monitoring methodology.

VKU Certification 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.

It is VKU’s opinion that the GHG emission reduction stated in the monitoring report Version 03 of 05-October-2023 for the “Renewable Power Project by Saipuram Wind Energies Private Limited” for the period 01-January-2021 to 31–December-2022 (inclusive of both the dates) are fairly stated.

The GHG emission reductions are calculated on the basis of approved methodology ACM0002 version 18.1 /11/ and the monitoring plan included in the registered VCS Joint PD & MR version 03 of 16-November-2018 /3/.

- Hence VKU is able to certify that the emission reduction from the project during the current monitoring period from 01-January-2021 to 31-December-2022 (inclusive of both the dates) amounts to 358,087 tCO₂e.

VKU is an approved ISO 14064-3:2019 accredited Validation/Verification Body ¹⁰. The assessment team meticulously followed the prescribed steps outlined in the standard, starting with Strategic Analysis, followed by Risk Assessment and the development of an Evidence Gathering plan. Subsequently, the team diligently executed the planned activities to collect the necessary evidence.

To ensure comprehensive evaluation, an Audit plan was prepared, and an Onsite visit was conducted accordingly. Onsite activities were carried out in accordance with the pre-established Evidence Gathering plan. Following the completion of the onsite activities, VKU proceeded with the post-site evaluation, which involved scrutinizing supporting documents, Monitoring Reports (MR), and Emission Reports (ER). The project then underwent Independent Technical review. Adhering to the stipulated requirements, the assessment team formed a positive opinion based on their findings.

The verification opinion is stated in the **Table No: 20 below;**

¹⁰ VKU is not accredited to validation at the time of submission of this project activity. (<https://verra.org/validation-verification/vku-certification-pvt-ltd/#vcs>)

Opinion	Final Documents	Monitoring period	Emission reduction achieved	Remarks
☒ Positive Opinion ☐ Negative Opinion Adverse Opinion ☐ Unmodified Opinion ☒ Modified Opinion ☐	Monitoring Report Version 03 dated 05-October-2023 Emission Reduction Sheet Version 03 dated 05-October-2023	01-January-2021 to 31-December-2022 (Inclusive of both dates)	358,087 tCO ₂ e	The GHG emission reductions are calculated on the basis of approved methodology ACM0002 version 18.1 /11/ and the monitoring plan included in the registered VCS Joint PD & MR /3/. Hence VKU is able to certify that the emission reduction from the project during the monitoring period 01-January-2021 to 31-December-2022 (inclusive of both the dates) amounts to 358,087 tCO ₂ e is in line with the applicable VCS requirements set out in section 3.15 of VCS Standard version 4.5 /8/ and that the verification of the GHG statement was conducted in accordance with ISO 14064-3; 2019.
Hence VKU is able to certify that the emission reduction from the project during the current monitoring period 01-January-2021 to 31-December-2022 (Inclusive of both dates) amounts to 358,087 tCO₂e assessed in line with the applicable VCS requirements set out in section 3.15 of VCS Standard version 4.5/08/. Hence the VVB hereby issue a positive and unmodified opinion in accordance with section 09 of ISO 14064-3; 2019 and section 9.7 specifically clause 9.7.1.6 & 9.7.2 of ISO 14065;2020 which is meeting the requirement stipulated under ISO/IEC 17029:2019 section 9.7 with a reasonable level of assurance for the reported GHG emission reduction data which is free from any material misstatement and is sufficiently supported by evidences provided to VVB by PP tabulated in Table no 05 of this report.				

Table No 21: Verification period: From 01-January-2021 to 31-December-2022 (both dates included)-

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	or Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
01-January-2021 to 31-December-2021	180,553	0	0	180,553

01-January-2022 to 31-December-2022	177,534	0	0	177,534
Total	358,087	0	0	358,087

* For the period from 01-January-2021 to 31-December-2022

Table No 22: Difference in Ex-ante and achieved emissions

<u>Ex-ante emissions reductions/removals</u>	<u>Achieved emissions reductions/removals</u>	<u>Percent difference</u>	<u>Justification for the difference</u>
266,287 tCO ₂ e	180,553 tCO ₂ e	-33.20%	During assessment it was observed that the estimated emission reduction to be achieved from the project activity for the current monitoring period was 532,574 tCO ₂ e (266,287 tCO ₂ e in both the years), whereas actual emission reductions achieved are 358,087 tCO ₂ e (180,553 tCO ₂ e and 177,534 tCO ₂ e respectively), which is approximately 32.76% lower than the estimated emission reductions. This lower generation is because of low PLF observed, low generation in the months from October to March due to certain natural conditions and breakdown that occurred during the monitoring period and was beyond the control of PP. Hence acceptable to the assessment team.
266,287 tCO ₂ e	177,534 tCO ₂ e	-33.33%	
532,574 tCO₂e	358,087 tCO₂e	-32.76 %	

APPENDIX A: <ABBREVIATIONS>

Abbreviations	Full texts
BE	Baseline Emissions
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER(s)	Certified Emission Reduction(s)
CL	Clarification Request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
DISCOM	Distribution Company
EB	Executive Board
EF	Emission Factor
ER	Emission Reductions
FAR	Forward Action Request
GHG(s)	Greenhouse gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
APTRANSCO	Andhra Pradesh Power Transmission Corporation Limited
MoV	Means of Verification
MR	Monitoring Report
NGO	Non-governmental Organization
ODA	Official Development Assistance
PD	Project Description
PE	Project Emission
PP(s)	Project Participant(s)
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
VKU	VKU Certification Ltd.
VCS	Verified Carbon Standard
VVS	Validation and Verification Standard
VVB	Validation and verification body

APPENDIX B: <AUDIT FINDINGS>

Type	Date	16-June-2023
CAR#01	Reference	Section 1.1, 1.7, 1.11, 2.2, 4.2 of Verification Protocol
Description of the Non-Conformance		
Section 1.1 of MR: During site visit it was observed that the project capacity is 104.5 MW. Hence, PP is requested to update the project capacity throughout the MR and in ER sheet as well. Section 1.11 of MR: PP is requested to remove the instructions as per VCS MR template Version 4.2. Section 1.7 of MR: - PP is requested to update the latitude and longitude of all the WTGs as assessment team is not able to verify it. - During site visit it was observed that the no. of WTGs is 51 and all the WTGs are used for ER Calculations but location and details of only 50 WTGs are mentioned in the MR. Hence, PP is requested to provide the details about all the 51 WTGs. - PP is requested to keep constant formatting of dates throughout the MR either DD/MM/YYYY or DD-MONTH-YYYY. Section 2.2 of MR: PP is requested to follow the details mentioned in the Section 2.2 of VCS MR Template version 4.2 and add the necessary details as required (procedures for engaging local stakeholders, dates of meetings announcements, etc.) and also provide the evidence for recording ongoing communication with Local Stakeholders. Section 3.1 of MR: PP is requested to mention total no of WTGs of Gamesa and Suzlon separately in the MR.		
1 st Response from PP	Date	20-July-2023
- The total capacity of the project is 104.5 MW, but the capacity of the project activity is 102.5 MW as per registered PDD and PP is claiming ERs based on the generation achieved from 102.5 MW capacity. The MR and ER sheet is updated accordingly. - In section 1.11 of revised MR version 2.0, the row mentioning the instructions is deleted. - Section 1.7 of revised MR Version 2.0 following changes are done- - Latitude and longitude of all the WTGs are updated. - For total capacity of the project 104.5 MW, there are 51 WTGS, whereas for the project activity registered under VCS i.e 102.5 MW only 50 WTGs are there, and ER calculation is based on same. - The date is revised in the format DD-MONTH-YYYY - In section 2.2 of the revised MR, all the required details in line with the Section 2.2 of VCS MR Template version 4.2 has been incorporated. - In section 3.1 of the revised MR the total number of WTGs of Gamesa and Suzlon are mentioned separately.		

1 st Assessment by Audit Team	Status	Closed	Date	13-August-2023
Section 1.1 of MR: During Assessment it was verified that capacity of project is as per registered PD and deviation is taken to incorporate the change. Hence Accepted. #Closed. Section 1.11 of MR: During Assessment it was verified that PP has now deleted the instructions. Hence Accepted. #Closed. Section 1.7 of MR: - During Assessment it was verified that PP has now update lat and long of all the WTGs. Hence Accepted. #Closed. - During Assessment it was verified that PP is using apportioning procedure on JMR prepared for 104.5 capacity. Hence Accepted. #Closed. - During Assessment it was verified that PP has now kept format of dates constant. Hence Accepted. #Closed. Section 2.2 of MR: During Assessment it was verified that PP has now incorporated the details about LSC. Hence Accepted. #Closed. Section 3.1 of MR: During Assessment it was verified that PP has now mentioned the total no. of WTGs of gamesa and suzlon seperately. Hence Accepted. #Closed. #CAR01 Closed				

Type	Date	16-June-2023
CAR#02	Reference	Section 4.3, 5.1, Appendix and cover page of Verification Protocol
Description of the Non-Conformance		
Section 4.2 of MR: - During site visit it was observed that method for calculation of net electricity mentioned in the MR and ER is not correct. Through interviews of the concerned personnel, it was observed that bill is based on gross generation and net electricity supplied is calculated based on net meter reading following apportioning procedure and same is verified from the JMR sheets as well. Hence PP is requested to update the method of calculation in MR and ER Sheet as well. - PP is requested to mention the details about all the meters used in this project Section 4.3 of MR: - PP is requested to mention the QA/QC procedures as per VCS MR Template Version 4.2. - PP is requested to update the line diagram as the one given here is not consistent as per the actual implementation of project activity. Section 5.1 of MR: PP is requested to provide the breakdown details in MR also as per VCS MR Template version 4.2. Appendix Section of MR: - During Site Visit it was verified that PP has installed new meters in 2023 and those meters were pre- calibrated. Hence PP is requested to mention new meter details as well in the MR and provide calibration certificates for the same.		

During Site Visit it was observed that net meter details are not provided in the MR. PP is requested to provide information about the same as net meter values are used in calculation for deriving final values of exported electricity as confirmed through interviews of concerned personnel. This parameter needs to be mentioned in monitoring parameter also and therefore deviation in the monitoring plan is sought to be taken by PP. 5. Editorial corrections throughout the MR: PP is requested to update the font size throughout the MR as per VCS MR template Version 4.2.					
1 st Response from PP			Date		20-July-2023
1. The method of calculation in MR and ER Sheet is updated. The net meter is used for billing followed by apportioning procedure, whereas the bulk meter is installed at 220 KV, and it is used to calculate transmission loss. The net electricity is calculated by the state electricity board and provided in the monthly generation statement (JMR) which covers generation of 104.5 MW whereas capacity as per registered PD is 102.5 MW. Hence, the net electricity reading is followed by apportioning to get the generation based out of 102.5 MW capacity. The apportioning is applied as the JMR generated is for 104.5 MW but the capacity as per registered PD is 102.5 MW. The use of bulk meter is incorporated and the same has been updated in the ER sheet and MR as well. 2. In section 4.3 of the revised MR - The QA/QC procedures has been included as per VCS MR template version 4.2. - The line diagram has been updated as per actual implementation of the project activity. 3. The breakdown details has been provided in appendix 2 and references are provided in Section 1.1 and 3.1 of the revised MR. 4. In appendix 1 of the MR - The monitoring period of this MR is 01-January -2021 to 31–December-2022 and meter replacement done in 2023 so the information is not relevant to this monitoring period hence same is not mentioned in MR. - The net meter is used for billing, and bulk meter is installed at 220 KV, and it is used to calculate transmission loss. The net electricity will be calculated by the state electricity board and provided in the monthly generation statement (JMR) which is further apportioned. Hence, the net electricity reading will be directly sourced from the monthly generation statement (JMR). A calibration certificate for the bulk meter is also submitted with the responses. Apart from this, a deviation in the monitoring plan is also applied and same is mentioned in Section 3.2.2 of the revised MR. 5. The font size has been updated throughout the revised MR as per VCS MR template Version 4.2.					
1 st Assessment by Audit Team		Status	Closed	Date	13-August-2023
1. Section 4.2 of MR:					

- During Assessment it was verified that PP has now incorporated the same in the MR. Hence Accepted. #Closed. - During Assessment it was verified that PP has now mentioned the details of all the meters used. Hence Accepted. #Closed.
2. Section 4.3 of MR: - During Assessment it was verified that PP has now mentioned QA/QC Procedures as per VCS MR Template V 4.2. Hence Accepted. #Closed. - During Assessment it was verified that PP has now updated the single line diagram. Hence Accepted. #Closed.
3. Section 5.1 of MR: During Assessment it was verified that PP has now provided the breakdown details and mentioned the same in MR. Hence Accepted. #Closed.
4. Appendix Section of MR: During Assessment it was verified that PP has now mentioned the details about the same in MR. Hence Accepted. #Closed.
5. Editorial corrections throughout the MR: During Assessment it was verified that PP has updated the font size as per VCS MR template V 4.2. Hence Accepted. #Closed.
#CAR02 Closed

Type	Date	26-September-2023
CAR#03	Reference	Section 1.2, 1.8, 1.10, 1.11, of Verification Protocol
Description of the Non-Conformance		
Cover Page of MR: Update date and version at the time of final submission? #OPEN. Section 1.2 of MR: As per template the status of the project activity wrto AFLOU needs to be stated. #OPEN. Section 1.8 of MR: Please state the guidance under which the scale of the project is defined. #OPEN. Section 1.10 of MR: There are international exchanges where power is traded and the template requires the PP to fill this section. As per the template the PP is requested to provide a list of all and any other programs under which the project is eligible to create another form of GHG-related environment credit. #OPEN. Section 1.11 of MR: - PP is requested to identify, "SD contributions described in Table 1 of this report contribute to achieving any nationally stated sustainable development priorities, including any provisions for monitoring and reporting the same" as per the template requirements. #OPEN. - PP to justify why only 2 SDG contributions are listed that are derived from the project activity. #OPEN. - Add SDG contributions as appendices in the MR as per VCS MR Template version 4.2. #OPEN.		
1 st Response from PP	Date	05-October-2023
On the cover page of MR: The date and version number has been updated.		

2. In section 1.2 of MR: As per template guidelines the status of the project activity wrto AFLOU has been added. 3. In section 1.8 of MR: As per the CDM project standard for project activities para 119 clearly explains about the project scale for type I projects. 4. In section 1.10 of MR: As per the template guidelines list of all and any other programs under which the project is eligible to create another form of GHG-related environment credit has been added and the supporting links for the same has been provided. 5. In section 1.11 of the MR: This is a voluntary project activity doesn't contribute to achieving any nationally stated sustainable development priorities. As per VCS standard 4.4 already registered projects can have 2 SDG contributions till year 2025. More than 2 SDGs are required for the project that are getting registered in year 2023. Hence 2 SDGs are sufficient for this monitoring period. The SDG contributions are added in the appendix 3 of the revised MR version 3.0					
1 st Assessment by Audit Team		Status	Closed	Date	05-October-2023
1. On the cover page of MR: During Assessment it was verified that the date and version number has now been updated. Hence Accepted. # Closed. 2. In section 1.2 of MR: During Assessment it was verified that the status of the project activity wrto AFLOU has been added. Hence Accepted. # Closed. 3. In section 1.8 of MR: During Assessment it was verified that PP has now stated the guidance under which the scale of the project is defined. Hence Accepted. # Closed 4. In section 1.10 of MR: During Assessment it was verified that as per the template guidelines list of all and any other programs under which the project is eligible to create another form of GHG-related environment credit has been added and the supporting links for the same has been provided. Hence Accepted. # Closed 5. In section 1.11 of the MR: During Assessment it was verified that PP has identified, "SD contributions described in Table 1 of this report contribute to achieving any nationally stated sustainable development priorities, including any provisions for monitoring and reporting the same" as per the template requirements. Hence Accepted. # Closed During Assessment it was verified that PP has now stated why they have listed only 2 SDGs contributions by the project activity. Hence Accepted. # Closed During Assessment it was verified that the SDG contributions are added in the appendix 3 of the revised MR version 3.0. Hence Accepted. # Closed #CAR 03 Closed					

Type	Date	26-September-2023
CAR#04	Reference	Section of 2.1, 3.1 3.2.2 and 5.4 of Verification Protocol
Description of the Non-Conformance		
1. Section 2.1 of MR: This section does not elaborate about the negative socio-economic impacts and the steps taken to mitigate them. #OPEN.		

2. Section 3.1 of MR:

- Please elaborate on the number of WTGs and individual capacity based on the registered PD. #OPEN.
- PP is requested to elaborate on the baseline scenario with respect to the emission sources. #OPEN.
- PP to provide the following technical details: 1) The voltage generated at the hub is not mentioned. 2) Additionally, the voltage, current that is generated at the rotor that is transformed and connected to PSS. Is the voltage stepped up further to synchronise with the grid? 3) Specification of the transformers 4) Any internal available automatic metering system installed? 5) Meters installed at PSS if any and its relevance in the overall measurement of energy generation? 6) Distance (nearest and longest) distance from the WTGs to the substation connected? 7) How many feeders are present in substation? Are they dedicated feeders? If not, how is the measurement of energy generation done? 8) Any other suitable information. #OPEN.

3. **Section 3.2.2 of MR:** Please state the impact of the new formula in the estimation of the ER between the present MP and the previous MPs. This is required as per para 3.20.2 of the VCS Standard v4.4. #OPEN.

4. **Section 5.4 of MR:** Please provide year wise breakup of ERs and their respective difference from the ER estimated in the registered PD. #OPEN.

1stResponse from PP

Date

05-October-2023

1. **Section 2.1** of the revised MR version 3 has been updated.

2. **In Section 3.1 of MR:**

- The number of WTGs and individual capacity based on the registered PD has been added.
- The baseline scenario with respect to the emission sources has been added.
- All the details have been incorporated in the revised MR version 3.0

3. **In section 3.2.2 of MR:** There is no impact of the new formula in the estimation of the ER between the present monitoring period and previous monitoring period and also there is no impact on existing applicability conditions, methodology, baseline and additionality and the same has been mentioned in the revised MR version 3.0.

4. **In section 5.4 of MR:** Year wise breakup of ERs and their respective difference from the ER estimated in the registered PD has been added.

1stAssessment by Audit

Status

Closed

Date

05-October-2023

Team

1. **Section 2.1 of MR:** During Assessment it was verified that PP has now updated the section accordingly. Hence Accepted. # Closed

2. **Section 3.1 of MR:**

- During Assessment it was verified that PP has now elaborated the section as per PD. Hence Accepted. #Closed
- During Assessment it was verified that PP has now elaborated on the baseline scenario with respect to the emission sources. Hence Accepted. # Closed
- During Assessment it was verified that PP has now provided the following technical details: 1) The voltage generated at the hub is not mentioned. 2) Additionally, the voltage, current that is generated at the rotor that is transformed and connected to PSS. Is the voltage stepped up further to synchronise with the grid? 3) Specification of the transformers 4) Any internal available automatic metering system installed?

5) Meters installed at PSS if any and its relevance in the overall measurement of energy generation? 6) Distance (nearest and longest) distance from the WTGs to the substation connected? 7) How many feeders are present in substation? Are they dedicated feeders? If not, how is the measurement of energy generation done? 8) Any other suitable information. Hence Accepted. # Closed.

3. **Section 3.2.2 of MR:** During Assessment it was verified that PP has updated the section accordingly. Hence Accepted. # Closed.
4. **Section 5.4 of MR:** During Assessment it was verified that PP has now mentioned year wise breakup of ERs and their respective difference from the ER estimated in the registered PD. Hence Accepted. # Closed.

#CAR 04 Closed

Type	Date	16-June-2023
CL#01	Reference	Cover Page, Section 1.1, 1.5, 1.9, 1.10, and 2.2 of Verification Protocol
Description of the Non-Conformance		
1. Section 1.1 of MR: • PP is requested to provide the power purchase agreement to the assessment team. • PP is requested to calculate the no. of days again • PP is requested to clarify the full name and full form of the relevant DISCOM. • PP is requested to clarify whether first and last dates are included or not 2. Section 1.5 of MR: PP is requested to provide the commissioning certificate to verify the same. 3. Section 1.9 and 1.10 of MR: PP is requested to provide self-declaration regarding not availing any other form of Environmental Credit, no double counting of Emission reduction occurred, non-participation in other emission trading schemes. and other binding limits. 4. Section 3.1 of MR: During Site visit it was observed that O & M Entity changed in 2022 and was transferred to the Greenko officials only and before that Gamesa was the O&M entity. Hence PP is requested to write the name of O&M entities in MR for entire monitoring period and also provide the O&M agreements and O & M transfer agreement to verify the same.		
1 st Response from PP	Date	20-July-2023
1. In section 1.1 of the revised MR • The power purchase agreement has been provided. • The number of days has been revised. • The full name and full form of relevant DISCOM is updated throughout the MR • The present monitoring period is 01-Jan-2021 to 31-Dec-2022 & it is inclusive of both first and last dates. 2. The commissioning certificate has been provided.		

3. The self-declaration has been submitted as a supporting document.

4. At present there are two O&M contracts one is Greenko itself and the other is Suzlon. Earlier the Gamesa was doing the O&M but in 2022 it was taken up by Greenko itself and the same has been updated throughout the revised MR. Along with that the supporting documents are also provided.

1 st Assessment by Audit Team	Status	Closed	Date	13-August-2023
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1. Section 1.1 of MR:

- During Assessment it was verified that PP has now provided PPA. Hence Accepted. #Closed.
- During Assessment it was verified that PP has calculated the no. of days again. Hence Accepted. #Closed.
- During Assessment it was verified that PP has now updated the full form of DISCOM. Hence Accepted. #Closed.
- During Assessment it was verified that PP has included both start and end dates. Hence Accepted. #Closed.

2. Section 1.5 of MR: During Assessment it was verified that PP has submitted the commissioning certificate. Hence Accepted. #Closed.

3. Section 1.9 and 1.10 of MR: During Assessment it was verified that PP has now provided the self-declaration. Hence Accepted. #Closed.

4. Section 3.1 of MR: During Assessment it was verified that PP has now provided O & M Agreement and O & M Change Agreement.

#CL01 Closed

Type	Date	16-June-2023
CL#02	Reference	Section of 3.1, 4.2, 4.3 and 5.1 of MR
Description of the Non-Conformance		
1. Section 4.2 of MR: • PP is requested to update the abbreviation. • PP is requested to provide JMRs as the ones given are not accessible 2. Section 4.3 of MR: • PP is requested to clarify why they have used CDM procedures here. • PP is requested to update the futuristic sentences throughout the MR. • PP is requested to provide invoices as ones given are not accessible. • PP is requested to clarify what happens in case both meters stop working • PP is requested to provide Training records to verify the personnel training conducted. 3. Section 5.1 of MR: • PP is requested to write the unit for Ex-ante and achieved emission reductions. • PP is requested to justify the reason behind 31.57% lower achieved emission reductions than the estimated emission reductions.		
1 st Response from PP	Date	20-July-2023

1. In section 4.2 of MR

- The abbreviations have been updated.
- The JMRs has been provided.

2. In section 4.3 of MR:

- It has been updated to VCS.
- The sentence has been reframed in the revised MR.
- The invoices have been submitted.
- In case both the meters stop working a standby meter is used to ensure the continued monitoring of energy meters and same is updated in MR.
- The training records has been provided.

3. In section 5.1 of MR:

- The unit for Ex-ante and achieved emission reductions has been updated.
- 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 532,574 tCO₂e, whereas actual emission reductions achieved are 358,087 tCO₂e. Thus, the actual achieved GHG emission is approximately 32.76% is lower than the estimated than the estimated value. This is due to the lower PLF because of lesser wind velocity at the site which is not in the control of the project proponent. Therefore, the lower GHG accounting is acceptable.

1 st Assessment by Audit Team	Status	Closed	Date	13-September-2023
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1. Section 4.2 of MR:

- During Assessment it was verified that PP has now updated the abbreviation. Hence Accepted. #Closed.
- During Assessment it was verified that PP has now provided JMRs again. Hence Accepted. #Closed.

2. Section 4.3 of MR:

- During Assessment it was verified that PP has now removed the word CDM here. Hence Accepted. #Closed.
- During Assessment it was verified that PP has now updated the futuristic sentences throughout the MR. Hence Accepted. #Closed.
- During Assessment it was verified that PP has now provided the invoices again. Hence Accepted. #Closed.
- During Assessment it was verified that PP has now mentioned the procedure in case both meters stop working. Hence Accepted. #Closed.
- During Assessment it was verified that PP has now provided training records. Hence Accepted. #Closed.

3. Section 5.1 of MR:

- During Assessment it was verified that PP has now mentioned the units for Ex-ante and achieved emission reductions. Hence Accepted. #Closed.
- During Assessment it was verified that PP has now mentioned the reason behind lower emissions achieved in the current monitoring period. Hence Accepted. #Closed.

#CL 02 Closed

Type	Date	26-September-2023
CL#03	Reference	Section 3.2.2, 4.2, 4.3, 5.1, and 5.4 of Verification Protocol
Description of the Non-Conformance		
Section 3.2.2 of MR: PP to clarify whether it is 104.5 or 104.2? #OPEN. Section 4.2 of MR: PP is requested to clarify the relevance of the readings taken by the meters in the PSS in the ER calculation. #OPEN. Section 4.3 of MR: - The project is already implemented however the sentence implies that the project is under implementation. Please clarify. #OPEN. - Since the meters at the Govt SS measures all the energy generated from three sites (2 of which are not project activity), PP to clarify how energy measurement of the WTGs present in the project bundle is measured? What is the formula applied to measure the same. #OPEN. - What does the denominator denote with respect to the capacity of the project activity registered under VCS? #OPEN Section 5.1 of MR: Notation is not consistent with the registered PD or standard convention. #OPEN. Section 5.4 of MR: Since the MP covers full two years vintage, PP to clarify how low wind velocity in the ensuing period is a valid reason for low ERs. PP to analyse the generation pattern to conclusively state the reason. #OPEN. Appendix 1 of MR: - Provide calibration certificate numbers or reference for the same. #OPEN. - Please express the same as percentage of available hours. #OPEN.		
1 st Response from PP	Date	05-October-2023
In section 3.2.2 of MR: It has been revised to 104.5 and made in lined with registered PDMR version 3.0. Section 4.2 of the MR has been revised. In section 4.3 of MR: - The project is already commissioned and now the sentence has been revised. - All the corrections have been done and it has been revised in the given section of the revised MR version 3.0. - The denominator denotes the total capacity of the project activity which is 104.5 as per registered PDD and the same has been included in the formula. In section 5.1 of MR: The notation has been revised as per registered PDMR version 3.0. In section 5.4 of MR: This is due to the lower PLF because of lesser wind velocity at the site and the generation was low for the months October to March which is not in the control of the project proponent. Therefore, the lower GHG accounting is acceptable and the same has been stated in the monitoring report. In appendix 1 of the MR: - The calibration certificate numbers has been added in the footnote.		

The percentage wise of breakdown details added in appendix 2 of the revised MR version 3.0					
1 st Assessment Team	by Audit	Status	Closed	Date	05-October-2023
In section 3.2.2 of MR: During Assessment it was verified that PP has updated the capacity as per the registered PD. Hence Accepted. # Closed. Section 4.2 of the MR: During Assessment it was verified that has now revised the section accordingly. Hence Accepted. # Closed. In section 4.3 of MR: - During Assessment it was verified that PP has now revised the sentence. Hence Accepted. # Closed. - During Assessment it was verified that PP has now updated the sections accordingly. Hence Accepted. # Closed. - During Assessment it was verified that PP has now mentioned the denominator in the formula used. Hence Accepted. # Closed. In section 5.1 of MR: During Assessment it was verified that the notations have been revised as per registered PD. Hence Accepted. # Closed. In section 5.4 of MR: During Assessment it was verified that PP has now clarified the reason for low generation. Hence Accepted. # Closed. In appendix 1 of the MR: - During Assessment it was verified that the calibration certificate number has been added in the footnote. Hence Accepted. # Closed. - During Assessment it was verified that the PP has now mentioned breakdown details percentage wise in Appendix section of MR. Hence Accepted. # Closed.					
#CL 03 Closed					

APPENDIX C: <COMPETENCE STATEMENT >

Team Leader



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Vivek Kumar Ahirwar
Nationality	Indian
Countries of Experience	India, Madagascar, Thailand, Indonesia, Bangladesh, Nepal, Ghana, Uganda, Kenya etc
Education Qualification	B.E. (Mechanical Engineering) M. Tech (Energy Management)
Year of Experience	12 Years +
Area of Expertise	Climate Change & Environment
Eligible Sectoral Scope	TA 1.1 - Thermal energy generation TA 1.2 - Renewables TA 2.1 - Energy Distribution TA 3.1 - Energy Demand

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, 2.1, 3.1)	YES
Financial Expert	YES

Reviewed by	Vandana Gupta (Quality Manager)	Date	28/02/2023
Approved by	Dr. Vikas Kumar Aharwal (Director)	Date	04/03/2023

Technical Reviewer:



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Sanjay Kumar K
Nationality	Indian
Countries of Experience	India
Education Qualification	B.E. (Civil Engineering) M. Tech (Environmental Engineering)
Year of Experience	20 Years +
Area of Expertise	Climate Change & Environment Sustainable Development GHG Footprints
Eligible Sectoral Scope	TA 1.2 - Renewables TA 3.1 - Energy Demand TA 6.1 - Construction

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 (1.2, 3.1, 6.1)	YES
Financial Expert	YES

Reviewed by	Vandana Gupta (Quality Manager)	Date	03.03.2023
Approved by	Vivek Kumar Ahirwar (Technical Manager)	Date	03.03.2023

Validator/Verifier



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Deepali Sharma
Nationality	Indian
Countries of Experience	India
Education Qualification	B.Sc. (Environmental Science) M.Sc. (Environmental Science)
Year of Experience	2 years as Intern 9 months as Employee
Area of Expertise	Climate Change & Environment
Eligible Sectoral Scope	NA

Roles

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

Reviewed by	Vandana Gupta (Quality Manager)	Date	29.03.2023
Approved by	Vivek Kumar Ahirwar (Technical Manager)	Date	29.03.2023

Project Trainee



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Monika Jha
Nationality	Indian
Countries of Experience	India
Education Qualification	M.Sc. (Environmental Science) B.Sc. (Medical Science) PG Diploma (Environmental Science and sustainable development)
Year of Experience	1.9 years in <i>UA Consultants as Environmental Consultant.</i>
Area of Expertise	NA
Eligible Sectoral Scope	NA

Roles

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

Reviewed by	Vandana Gupta (Quality Manager)	Date	06/12/2022
Approved by	Vivek Kumar Ahirwar (Technical Manager)	Date	06/12/2022