



Verified Carbon Standard

GREEN ENERGY PROJECT AT KUTCH BY POWERICA LIMITED



South Asia

TÜV SÜD South Asia Pvt Ltd

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Prepared By	<i>TÜV SÜD South Asia Pvt Ltd</i>

Contact	<p>Solitaire, 4th Floor, ITI Road, Aundh Pune, Maharashtra 411007 India.</p> <p>shruti.kudtarkar@tuvsud.com</p> <p>www.tuvsud.com</p>
Approved By	Shruti Kudtarkar, VVB Manager, TUV SUD South Asia Pvt. Ltd.
Work Carried Out By	<p>Pankaj Kumar (Assessment Team Leader)</p> <p>Arjun Vyas (Verifier and Technical Expert)</p> <p>Sudheendra K (Technical Reviewer)</p> <p>Pratiksha Patil (Trainee Verifier)</p>

Summary:

TÜV SÜD South Asia Pvt Ltd has performed the verification of VCS 1210 project “Green Energy Project at Kutch by Powerica Limited”. This report summarizes the findings of the gap verification of this project, performed on the basis of VCS project standard Version 4.4 criteria and CDM Methodology ACM0002 v20.0.

The Project Participants are Powerica LIMITED (Registry User) and EKI Energy Services Ltd. (Project Consultant).

Verification purpose: The objective of the verification work is to comply with the requirements of Verified Carbon Standards requirements. According to this assessment TÜV SÜD shall ensure that the project activity has been implemented and operated as per the VCS PD, and that all physical features (technology, project equipment, monitoring and metering equipment) of the project are in place,

The second crediting period for VCS 1210 project is from 14-July-2021 to 13-July-2031. This is 2nd verification of the monitoring period 01-January-2022 to 31-December-2022. The total GHG emission reductions for the current monitoring period are 39,235 tCO₂e. No uncertainties were noticed during the verification.

04 Clarification Requests (CL) and 05 Corrective Action Request (CAR) have been raised during the course of verification process and has been successfully closed. No Forward Action Request (FAR) was raised during this verification.

In conclusion, it is TÜV SÜD's opinion that the project activity “Green Energy Project at Kutch by Powerica Limited”, as described in the VCS PD version 5.0 and MR version 4.0 meets all relevant requirements of VCS for the monitoring period 01-January-2022 to 31-December-2022.

1	Introduction	4
1.1	Objective	4
1.2	Scope and Criteria	4
1.3	Level of Assurance.....	5
1.4	Summary Description of the Project	5
2	Verification Process	5
2.1	Method and Criteria.....	5
2.2	Document Review	6
2.3	Interviews.....	6
2.4	Site Visits.....	7
2.5	Resolution of Findings	7
2.5.1	Forward Action Requests	7
2.6	Eligibility for Validation Activities	7
3	Validation Findings	8
3.1	Participation under Other GHG Programs	8
3.2	Methodology Deviations.....	8
3.3	Project Description Deviations.....	8
3.4	Grouped Project	8
4	Verification Findings	8
4.1	Project Implementation Status	8
4.2	Safeguards	13
4.2.1	No Net Harm	13
4.2.2	Local Stakeholder Consultation	13
4.3	AFOLU-Specific Safeguards	13
4.4	Accuracy of GHG Emission Reduction and Removal Calculations	13
4.5	Quality of Evidence to Determine GHG Emission Reductions and Removals	15
4.6	Non-Permanence Risk Analysis.....	17
5	Verification OPINION	17
	APPENDIX 1: DOCUMENTS REVIEWED	19
	APPENDIX 2: List of findings	20

1 INTRODUCTION

1.1 Objective

TÜV SÜD has been commissioned by the aforementioned client to perform an independent verification assessment.

The objective of the verification work is to have an independent evaluation of a project activity by a validation and verification body against the requirements of the VCS Project Standard Version 4.4, on the basis of the monitoring report version 4.0. According to this assessment TÜV SÜD shall:

- ensure that the project activity has been implemented and operated as per the registered PD, and that all physical features (technology, project equipment, monitoring and metering equipment) of the project are in place,
- ensure that the published MR and other supporting documents provided are complete, verifiable and in accordance with applicable VCS project standard v4.4.
- ensure that the actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology,
- evaluate the data recorded and stored as per the applicable requirements.

1.2 Scope and Criteria

The scope of assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of VCS project activities, the scope is set by:

- VCS v4.4 requirements
- Baselines and monitoring methodologies ACM0002 version 20/3/.
- Environmental issues relevant to the applicable sectoral scope
- Current technical and operational knowledge of the specific sectoral scope and information on best practice
- Stakeholder consultation and feedback

The verification process is not meant to provide any form of consulting for the project participant (PP). However, stated requests for clarifications, corrective actions, and/or forward actions may provide input for improvement of the Monitoring Report.

1.3 Level of Assurance

The errors identified in the project are below the threshold limit of materiality and hence not material. The GHG emission reductions are calculated without material misstatements.

The VVB confirms that a reasonable level of assurance has been achieved during the verification process.

1.4 Summary Description of the Project

The main purpose of this project activity is to generate clean form of electricity through renewable wind energy source. POWERICA LIMITED is the owner of the proposed project activity. The Project has installed 12 numbers of WEGs of 1.8 MW capacity of Vestas make each accounting to a total of 21.6 MW installed in Bhachau, in Kutch district, Gujarat.

The Project activity is a new facility (Greenfield) and it plans to utilize wind energy to generate electricity and supply it to regional grid, which is a part of the NEWNE (Northern, Eastern, Western and North-Eastern) grid of India. In the absence of the project the same electricity would have been generated through fossil fuel dominated power plants. Thus, the project displaces the electricity from the grid and hence, the electricity grid has been taken as the baseline to the project activity. Emission reductions are claimed on the net electrical energy that is sold to the grid utility.

During the current monitoring period of 1-January-2022 to 31-December-2022, the project has supplied 42,165.92 MWh of electricity to the Indian grid, and thus contributing to the GHG reductions of 39,235 tCO₂e.

2 VERIFICATION PROCESS

2.1 Method and Criteria

The information provided by the project participants is assessed by applying the means of verification specified in the VCS standard V4.4 of 21 December 2022.

A competent assessment team is selected prior to the start of the verification. The team is selected to cover the technical area(s), sectoral scope(s) and relevant host country experience for evaluating the VCS project activity. Additionally, a competent Technical Reviewer or Technical Reviewer Team is appointed to conduct checks on quality and completeness.

The verification team performs first a desk review, followed by an onsite audit on 24/06/2023, which results in the formation of a draft report and a list of findings. The next step involves the evaluation of the findings through direct communication with the PPs and then finally the preparation of the verification report. This verification report and other supporting documents then undergo an internal quality control by the VVB before submission to the VCS.

2.2 Document Review

The verification team performed desk review of the documents and on-site audit where the project description, monitoring report and supporting documents as mentioned in the Appendix-1 were reviewed, cross checked and compared with identified and stated requirements of VCS project standard v4.4.

2.3 Interviews

Sr. No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1	T	Arunkumar	Engineer, Powerica Limited	24 June 2023	Project activity actual implementation, technology employed, monitoring plan implementation, data measurement, recording & storage, ex-ante data & assumptions, calibration of meters, maintenance of plant equipment, QA/QC procedures	Pankaj Kumar Arjun Vyas
2	Kumar	Praveen	Senior Engineer, Vestas	24 June 2023		
3	Tiwari	Shivangi	Consultant - EKI Energy Services	24 June 2023		

2.4 Site Visits

The assessment team has performed the onsite visit for the verification of this project activity. The assessment team ensures a reasonable level of assurance has been achieved during the verification processes.

The VVB has been able to interview the relevant stakeholders and to cross-check the relevant documentation, implementation of the project activity and its design, monitoring performance, equipment in the project activity, etc. (all the evidence and processes of cross-check are detailed within this Verification Report). The interviewed personnel and the scope and mean of interview are listed in above Section 2.3 of this Verification Report.

Technical details & metering/monitoring arrangement verified through onsite visit and documents shared by PP. All the documents were cross checked to ensure conservative estimation of emission reduction.

During the onsite audit on dated 24 June 2023, the PP representatives were questioned about the implementation of the project activity. Several topics like the verification of commissioning date of WTGs, the generation, recording, and monitoring of the data and the error accountability were discussed. To cross check the information provided by PP, various documents like technical specifications, commissioning certificates/5/, Power Purchase Agreement (PPA)/6/, Certificate for share of electricity issued by GETCO/7/, invoices/8/, calibration certificates/9/, etc. were also verified.

2.5 Resolution of Findings

04 Clarification Requests (CL) and 05 Corrective Action Request (CAR) have been raised during the course of verification process and has been successfully closed. No Forward Action Request (FAR) was raised during this verification. Please refer to Appendix -2 of the report.

2.5.1 Forward Action Requests

NO FAR was raised during the earlier validation and verification and current Verification.

2.6 Eligibility for Validation Activities

This section is not applicable as it is verification.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

The project proponent has provided undertaking that it will not claim any GHG credits in any GHG program other than that under VERRA during the current monitoring period. It is also confirmed that the project is not registered with any other GHG programme.

3.2 Methodology Deviations

No methodology deviation has been taken in this project.

3.3 Project Description Deviations

No project description deviation has been taken in this project.

3.4 Grouped Project

This is not a grouped project. Hence, this section is not applicable.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

During the audit, it was concluded that the project has been implemented as per registered VCS PD /10/. The same has been verified from the commissioning certificate, statutory clearances submitted. During the current monitoring period it was observed that no unforeseen situation evolved which can impact the operation of the project activity. Scheduled maintenance was carried out as per the instruction of the manufacturer and the same is acceptable to the assessment team.

There were three major breakdowns reported for WTGs JW09, JW10 and NM82-04 during the monitoring period as verified from the Plant Log sheets/11/ submitted by PP. Only Schedule maintenance was carried out as per instruction of manufacture and the same project location is confirmed by the assessment team through interview with PP during onsite audit and assessment of monitoring report. Assessment team also checked the technical details of the project site containing latitude and longitude of the project site and confirmed that the details as mentioned in the registered VCS-PD are correct.

The verified geo-coordinates of each WTG are as follows-

Sr. No.	WTG No.	Latitude	Longitude	Village
1	JW10	23° 11' 56" N	70° 32' 48" E	Jangi
2	JW12	23° 12' 29" N	70° 32' 13" E	Jangi
3	JW13	23° 12' 12" N	70° 32' 16" E	Jangi
4	JW27	23° 12' 49" N	70° 33' 35" E	Jangi
5	JW30	23° 11' 59" N	70° 31' 55" E	Jangi
6	JW09	23° 12' 3" N	70° 33' 2" E	Jangi
7	NM82-03	23° 11' 53" N	70° 35' 26" E	Vandhiya
8	NM82-04	23° 12' 5" N	70° 35' 19" E	Vandhiya
9	NM82-06	23° 11' 59" N	70° 35' 47" E	Vandhiya
10	NM82-07	23° 11' 53" N	70° 35' 58" E	Vandhiya
11	VW21	23° 12' 20" N	70° 37' 30" E	Vandhiya
12	VW32	23° 12' 12" N	70° 37' 12" E	Vandhiya

The start date of the project is 14-July-2011. This is the date on which Project activity started generating emission reductions which is in line with VCS project standard version 4.4. Assessment team has checked the Commissioning certificates and confirmed that the dates of Commissioning for each WTG are correct. The commissioning dates of WTGs are as follows:

Sr. No.	WTG ID	WTG No.	Capacity (MW)	Commissioning Date
1	VWT/1800/11-12/2133	VW 21	1.8	19-July-2011
2	VWT/1800/11-12/2134	VW 32	1.8	16-July-2011
3	VWT/1800/11-12/2135	NM 82-04	1.8	14-July-2011
4	VWT/1800/11-12/2136	JW 27	1.8	16-July-2011
5	VWT/1800/11-12/2309	NM 82-03	1.8	29-December-2011

6	VWT/1800/11-12/2316	JW 30	1.8	31-December-2011
7	VWT/1800/11-12/2311	NM 82-07	1.8	29-December-2011
8	VWT/1800/11-12/2312	JW 09	1.8	31-December-2011
9	VWT/1800/11-12/2313	JW 10	1.8	31-December-2011
10	VWT/1800/11-12/2314	JW 12	1.8	31-December-2011
11	VWT/1800/11-12/2315	JW 13	1.8	31-December-2011
12	VWT/1800/11-12/2310	NM 82-06	1.8	29-December-2011

The assessment team confirmed through review of evidence /5/, /6/, /12/ that there is no proposed or actual change to the project design during this monitoring period. The technical details were checked by the verification team with technical specification of WTGs/12/ and found consistent. The specification of the WTG is as follows:

Parameters	Value
Make	Vestas
Model	V-100
Rated Power	1800 KW
Rotor diameter	100 m
Swept Area	7850 m ²
Cut in wind speed	4 m/s
Cut out wind speed	20 m/s
No. of blades	3

Rotor Speed	14.4 rpm
Hub Height	80 m
Generator Type	Asynchronous with wound rotor, slip rings

The assessment team confirmed through interview with O & M personnel during audit that there are no changes into the project design during this monitoring period. It was found that the monitoring plan was implemented as per the requirement of the VCS PD & approved monitoring Plan and applied methodologies. The organisational role and responsibility as mentioned in the registered VCS PD followed onsite. The calibration of energy meter is carried out as per calibration frequency in monitoring plan. There is no delay in calibration of meters observed.

The project is not involved in other form of GHG emission program except CDM mechanism. VCU's generated from this verification will not be used for other trading program to avoid any kind of double counting. The same is confirmed by the PP during the verification remote audit. Assessment team also conducted independent review regarding the same and found that the statement of the PP is accurate, and project is not involved in any other kind of GHG trading for the present verifications/monitoring period. The web sites <https://registry.verra.org/app/projectDetail/VCS/1210> were checked to confirm the same:

Assessment team hereby also confirms from the declaration made by PP the projects are not registered under the any other scheme except CDM (UNFCCC Ref. No. 7671), Other environmental or GHG credits (i.e., GS4GG, GCC etc.) & REC mechanism of India and the same is cross-checked at <https://recregistryindia.nic.in>. Moreover, as per state tariff policy the project is not eligible to receive REC benefits as it is selling power to State electricity grid.

Assessment team concludes the following:

- a) The implementation status of project activity was found to be in compliance with registered PD.
- b) VVB has conducted the onsite audit to confirm the implementation status of the project.
- c) The commissioning date of the project activity was found to be accurately and consistently recorded.
- d) The actual operation of project activity was found to be in compliance with the description provided in registered PD.
- e) The emission reductions achieved during the current monitoring period are 39,235 tCO₂e.
- f) An undertaking letter has been submitted by PP for no double counting with any other GHG program. PP also has given a written declaration that project will not claim other form of GHG credit for the concerned monitoring period.

The project activity contributes to the sustainable development by utilizing wind energy for generating electricity which otherwise would have been generated through fossil fuels. Thereby reduction in usage of non-renewable sources used to generate energy.

Further the GHG emission reductions generated by the project activity has not been included by any other an emissions trading program or any other mechanism that includes GHG allowance trading. Also, the project has not received any other form of environmental credit and has not been participated/rejected under any other GHG programs.

Sustainable development contributions from the project activity have been mentioned in the VCS MR version 4.0 and found OK. It is further verified from the supportive document and interview with stakeholder. Project contribute positively to the sustainable development of the area.

The estimated emission reduction achieved from the project activity under 2nd crediting period (MP:02-Janaury-2022 to 13-December-2022) is 53,122 tCO₂e, whereas actual emission reductions achieved are 39,235 tCO₂e, which is 26.14% lower than estimated emission reductions.

4.2 Safeguards

4.2.1 No Net Harm

As PP does not see and identify any potential negative environmental and socio-economic impacts, hence this section is not required.

4.2.2 Local Stakeholder Consultation

Local stakeholder consultation has been conducted at the time of project registration. PP has described in detail in Section 2.2 of MR, as an ongoing communication with local stakeholders, the project proponent has kept grievance register at plant site office and sought comments/grievances/suggestions from local stakeholders including local community, government agencies and NGOs. However, no major comments/grievances/suggestions have been received from the stakeholders during the current monitoring period and all such minor suggestions have been take care by the PP. VVB has checked through interviews of the project participant and by reviewing evidence mentioned in Appendix 1 and confirms that the grievance mechanism and continuous engagement with stakeholders are in place and no negative feedback has been received by the project activity.

4.3 AFOLU-Specific Safeguards

Not applicable to this as this is not an AFOLU project activity.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

Means of verification	The verification team assessed whether the data and calculations of GHG emission reductions achieved resulting from the MR. The verification team has checked whether calculations of baseline GHG emissions, project GHG emissions and leakage GHG emissions have been carried out in accordance with the
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	formulae and methods described in the monitoring plan of the MR.
Findings	CAR#01 has been raised in this section.
Conclusion	<p>Ex-ante Parameter:</p> <p>EFgrid,OM,y= Parameter is fixed ex-ante for the entire 2nd crediting period which has been calculated This has been calculated as the last 3-year (2018-19,2019-20 and 2020-21) generation-weighted average, sourced from Baseline CO2 Emission Database, Version 17.0, Oct 2021 published by Central Electricity Authority (CEA), Government of India. The calculated value of OM is 0.9522 tCO2/MWh.</p> <p>EFgrid,BM,y= Parameter is fixed ex-ante for the entire 2nd crediting period. For ex ante calculation the most recent data available has been used and the build margin thus calculated is 0.8653 for the Indian Grid. The value of BM has been sourced from the CEA CO2 baseline database, version 17.</p> <p>EFgrid,CM,y = Parameter is fixed ex-ante for the entire 2nd crediting period The calculated value of CM is 0.9305 tCO2/MWh.</p> <p>Baseline Emissions:</p> <p>The baseline Emissions for a given year is calculated by multiplying the energy baseline with the grid emission factor. The grid in this case would be the 'Indian Grid'</p> <p>Formula Used: -</p> $BE_y = EG_{facility,y} \times EF_{grid,CM,y}$ <p>Where:</p> <p>BE_y = Baseline emissions in year y (t CO2/yr)</p> <p>EG_{facility,y} = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)</p> <p>EF_{grid,CM,y} = Combined margin CO2 emission factor for grid connected power generation in year y calculated using the latest version of "TOOL07: Tool to calculate the emission factor for an electricity system" (t CO2/MWh) .</p> <p>Monitored Parameter:</p> <p>As per the registered monitoring plan and requirement of the registered methodology following parameters needs to be monitored:</p> <p>EG_{facility,y} : Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)</p> <p>The energy generated from the wind farm is measured by Tri-vector Main and Check Meter (bi-directional) installed at WTG yard as well as at Vandhiya 220 KV Substation. Joint meter readings (export and Import) are recorded at substation meter as well as Meter located at WTG yard by representative of Gujarat Electricity Transmission Company (GETCO) and PP representatives. The Certificate for share</p>

	of electricity generated by the wind is issued by GETCO. The certificate for share of electricity contains final value of quantity of net electricity generation supplied by the project. The details of Meters are as follows:																														
	<table border="1"> <thead> <tr> <th>WTG ID</th> <th>Meter Serial No.</th> </tr> </thead> <tbody> <tr> <td>JW27</td> <td>GJU65932</td> </tr> <tr> <td>NM82-04</td> <td>GJU64200</td> </tr> <tr> <td>VW21</td> <td>GJU61844</td> </tr> <tr> <td>VW32</td> <td>GJU61845</td> </tr> <tr> <td>NM82-03</td> <td>GJU65938</td> </tr> <tr> <td>NM82-06</td> <td>GJU74496</td> </tr> <tr> <td>NM82-07</td> <td>GJU74498</td> </tr> <tr> <td>JW09</td> <td>GJU64145</td> </tr> <tr> <td>JW10</td> <td>GJU64174</td> </tr> <tr> <td>JW12</td> <td>GJU64152</td> </tr> <tr> <td>JW13</td> <td>GJU64146</td> </tr> <tr> <td>JW30</td> <td>GJU64165</td> </tr> <tr> <td>Line 1</td> <td>GJ-2311- A</td> </tr> <tr> <td>Line 2</td> <td>GJ-2363 A</td> </tr> </tbody> </table>	WTG ID	Meter Serial No.	JW27	GJU65932	NM82-04	GJU64200	VW21	GJU61844	VW32	GJU61845	NM82-03	GJU65938	NM82-06	GJU74496	NM82-07	GJU74498	JW09	GJU64145	JW10	GJU64174	JW12	GJU64152	JW13	GJU64146	JW30	GJU64165	Line 1	GJ-2311- A	Line 2	GJ-2363 A
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	JW30	GJU64165																													
	Line 1	GJ-2311- A																													
	Line 2	GJ-2363 A																													
The verification team has checked the entire monthly JMR reports for net electricity generated & supplied to the grid and crosschecked same with the invoices raised by PP towards state utilities for the monitoring period. All values are found correct. All the parameters are monitored and recorded as per the monitoring plan in the MR. The verification team has crosschecked the revised emission reduction sheet and monitoring report data with the JMR sheet and invoice and found all the values are matching.																															
PP has corrected the emission factor and verification team verified the all calculation. Hence, CAR is closed.																															

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

Means of verification	<p>The verification team checked the break down log for the monitoring period. During the verification audit and the feeder wise location of the wind plants is also checked.</p> <p>The metering arrangement is tri-vector bi-directional energy meters (main and check and one standby meter) at the State Electricity Board (SEB) substation. These meters record parameters including electricity exported & imported. Moreover, the meters are of accuracy class of 0.2S for project activity applied for verification.</p> <p>These electricity meters are being used by state electricity board for JMR (Joint Meter Reading) electricity generation statements. The Net electricity supplied to the grid is then calculated from export and import values. The net electricity exported to the grid is also cross checked from the invoices raised to respective state electricity board which is in line with Methodology requirement for small scale project activity. The main meter reading is taken jointly on a fixed day of every month for the preceding month at the delivery point and signed by the representatives of state utility and O&M</p>
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	<p>personnel. In the event of failure of main meter, the check meter is used in monitoring the electricity data. The agency is experienced in the monitoring system and is managing O&M of numerous other wind farm projects. Verification team confirms the metering process by interviewing PP representatives during remote audit and found the monitoring process is in line with approved PD.</p> <p>Calibration of all the meters is done by state electricity board officials as per the industry standards. However, the calibration is done once in three year which is within the specified period as described in the PD. The details of Calibration of the meters as confirmed during audit and calibration certificates are mentioned in Appendix 3 of this report. The assessment team checked the same and found correct.</p> <p>The energy meter recording the export and import from the grid at substation is under the control and supervision of state electricity board officials. Similarly, O&M contractor is responsible for monitoring of the generation data at CMS.</p> <p>The responsibilities and authorities of project management, data handling and recording, measurement methods and QA/QC procedure have been systematically established and formalized and the same was verified during the remote audit by interviewing PP representative and checking of records/ logbooks copy maintained at site.</p>
Findings	CAR#02 has been raised in this section.
Conclusion	The assessment team confirms that the value of net electricity exported to the grid as used in emission reduction calculation is correct.

4.6 Non-Permanence Risk Analysis

Not applicable.

5 VERIFICATION OPINION

TUV SUD has been engaged by Powerica Limited to perform periodic verification of the “Green Energy Project at Kutch by Powerica Limited”.

The management of the project participant/owner is responsible for the preparation of the GHG emissions data and the reported/estimated GHG emissions reductions on the basis set out within the project’s Monitoring Plan in the VCS MR and the approved methodologies.

Our Verification approach was based on the requirements as defined under the Kyoto Protocol, Marrakesh accord, as well as those defined by the CDM Executive Board and VCS Standard version 4.4. Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. The verification can confirm that:

- the project is operated as planned and described in the project document;
- the monitoring plan is as per the applied methodology;
- the monitoring process in Monitoring Report version 4.0 is as per the VCS RCP PD version 5.0
- the development and maintenance of records and reporting procedures are in accordance with the monitoring plan
- the monitoring system is in place and generates GHG emission reductions data;
- the GHG emission reductions are calculated without material misstatements.
- A reasonable level of assurance was achieved during the verification.
- No limitation observed for the present verification
- Project complies with the verification criteria for projects and their GHG emission reductions or removals set out in VCS program guideline version 4.1 and VCS Standard version 4.4.
- Project has been implemented in accordance with the project description and subsequently validated deviations.

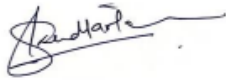
Verification period: From 01-January-2022---31- December-2022 (first and last date included).

Verified GHG emission reductions and removals in the above verification period.

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
01-January-2022--31-December-2022	39,235	0	0	39,235
Total	39,235	0	0	39,235

Year	Ex-ante emissions reductions /removals	Achieved emissions reductions /removals	Percent difference	Justification for the difference
01-January-2022--31-December-2022	53,122	39,235	-26.14	The actual Emission Reductions of this monitoring period is 26.14% lower than amount estimated ex ante for this monitoring period. The generation of electricity depends upon many other climatic conditions, which are not within the control of the project proponent.

Pune 17/8/2023



Shruti Kudtarkar,
TUV SUD South Asia Pvt. Ltd.
VVB Manager,

APPENDIX 1: DOCUMENTS REVIEWED

No	Title	References to the document
1	VCS Project Standard Version 4.4	December 2022
2	Monitoring Report, version 01	Dated 15-05-2023
3	CDM Methodology ACM0002	Version 20 dated 28-11-2019
4	Joint Validation and Verification report	Version 3 dated 20-12-2022
5	Commissioning certificate	Dated 25/07/2011
6	Power Purchase Agreement	Multiple dates
7	Certificate for share of electricity issued by GETCO	Multiple dates
8	Invoices	Multiple dates
9	Calibration Certificates	Multiple dates
10	Registered VCS PD MR	version 05 dated 20-12-2022
11	Plant breakdown records	Multiple dates
12	Daily Generation Records	30/6/2023
13	Employment Records	30/6/2023
14	Grievance Register	30/6/2023
15	Joint Meter Readings	30/6/2023
16	No Double Counting Certificate	30/6/2023
17	SAA Agreement	30/6/2023

18	Technical Specifications	30/6/2023
19	Training Records	14/7/2023
20	WTG EB Invoices	30/6/2023
21	Monitoring Report, version 02	30/6/2023
22	Monitoring Report, version 03	14/7/2023
23	Monitoring Report, version 04	10/8/2023
24	ER Sheet Version 1.0	15/5/2023
25	ER Sheet Version 2.0	30/6/2023

APPENDIX 2: LIST OF FINDINGS

Table 1. Remaining FAR from validation and/or previous verifications

NA.

Table 2. CL from this verification

CL ID	01	Section no.	NA	Date: 24/06/2023
Project Participant is required to submit documents listed below.				
1) Meter Calibration record for billing meters./9/ 2) GWO Training certificate of the employee./19/ 3) Description of Employment records./13/ 4) Detailed breakdown details for the months May-June 2022, Oct 2022 and Dec 2022./11/ 5) Double counting agreement for the monitoring period./16/ 6) JMR of phase 3 for month October and November/15/ 7) O&M Manual & Procedures/17/				
Project participant response				Date: 30/06/2023
1) The Meter Calibration Records for the billing meters have been provided. 2) Training Records of the employees have been provided. 3) Employment Records have been provided. 4) The Breakdown Details, covering the present monitoring period have been provided.				

<p>5) No Double Counting Certificate from the client, covering the present monitoring period has been provided.</p> <p>6) The JMRs for October and November 2022 have been provided.</p> <p>7) The O&M Agreement has been provided.</p>	
<p>Documentation provided by project participant</p>	
<p>1) Calibration Certificates</p> <p>2) Training Records</p> <p>3) Employment Records</p> <p>4) Breakdown Details</p> <p>5) No Double Counting Certificate</p> <p>6) JMRs & WTGs EB Invoices</p> <p>7) O&M</p>	
<p>VVB assessment</p>	<p>Date: 05/07/2023</p>
<p>1) PP has provided the meter calibration certificate which is consistent with the MR version 2.0 dated 30/6/2023.</p> <p>2) PP has proved the training records with date of training conducted, type of the training, training duration and no. of participants. PP further need to provide the list of participants with the certificates issued after their successful completion of training at both sites. Also PP need to provide the training records for Vandhiya training. Hence, CL is not closed.</p> <p>3) PP has not provided the detailed breakdown records, the records submitted on 30/6/2023 is same as the previous one. PP need to provide detailed breakdown records including the reasons/ justifications, actions taken and procedures followed during the breakdown and the measures taken to avoid it. Hence, CL is not closed.</p> <p>4) PP has not provided the employment records, Hence, CL is not closed.</p> <p>5) PP has provided the No Double Counting Certificate.</p> <p>6) PP has provided the JMR for Oct and Nov.</p> <p>7) PP has provided the service and availability agreement between PP and the Vestas Wind Technology private Limited. As per agreement, Vestas will provide maintenance service for 10 years but the agreed terms and conditions, and the annexures of the agreement is not present the provided document. PP need to provide the complete set of documents along with the agreed terms and conditions and the maintenance manual Vestas follow for each maintenance and services. Along with this, PP need to provide the scheduled and conducted maintenance details for this monitoring period. Hence, CL is not closed.</p>	
<p>Project participant response</p>	<p>Date: 14/07/2023</p>
<p>2) The training records have now been submitted, alongside the requisite information of training date, training type, duration and the attended participants. All the training sessions took place in Jangi only. As these were internal trainings, certificates were not issued to the attendees.</p> <p>3) The detailed breakdown records have now been submitted.</p>	

4) The employment records have now been submitted.	
7) The complete O&M Agreement has been provided herewith.	
Documentation provided by project participant	
2) Training Records	
3) Breakdown Details (Subfolder- 'Component Breakdown Reports')	
4) Employment Records	
7) O&M (Subfolder-'PH-III - SAA Agreement O_M_revised')	
VVB assessment	Date: 17/07/2023
2) PP has submitted the training records. Hence, CL is closed.	
3) PP has submitted the detailed breakdown records created by WTG manufactures Vestas. Breakdown records contains the summary, observation, corrective actions, observations with photographs and conclusion. Hence, CL is closed.	
4) PP has submitted the employment records. Hence, CL is closed.	
7) PP has submitted the complete O&M agreement with all annexures. Hence, CL is closed.	

CL ID	02	Section no.	4.1	Date: 24/06/2023
Description of CL				
In section 1.7 of MR Version 1.0 dated 15/5/2023. PP need to provide the clear and readable image of the location.				
Project participant response				Date: 30/06/2023
The corresponding section 1.7 has been updated with a new location map.				
Documentation provided by project participant				
Revised Monitoring Report (Version 2.0)				
VVB assessment				Date: 05/07/2023
PP has changed the site location images to the readable one. Hence, CL is closed.				

CL ID	03	Section no.	4.2.2	Date: 24/06/2023
Description of CL				

In section 2.2 of MR Version 1.0 dated 15/5/2023, PP need to justify the entries of grievances in grievance register which are not related to the project.	
Project participant response	Date: 30/06/2023
The grievance register that has been submitted is a clustered register, that encompasses various VCS projects of the client, including the one we are currently working on. This register is located at the Vandhiya substation, allowing local residents from different areas in Jangi, where the client's other projects are situated, to report their grievances. Consequently, it is possible that we may come across grievances from other areas that are not related to our specific project but pertain to other projects instead.	
Documentation provided by project participant	
Revised Monitoring Report (Version 2.0)	
VVB assessment	Date: 05/07/2023
The justification provided by the PP is found to be valid one but turning the provided objective evidence invalid. The clarification is raised on the registration of grievances in grievance register which does not concern the project activity. The security guard job application, remove rainwater from agricultural land, demanding help to remove stuck vehicle between road, driver job application and demand of financial aid for crane movement does not affect the project activity. As the provided grievance register does not indicate any registered grievance regarding project activity. Hence, CL is closed.	

CL ID	04	Section no.	NA	Date: 24/06/2023
Description of CL				
The machine total production hours as verified by the actual breakdown details does not justify the difference in the ERs between actual and estimated.				
Project participant response				Date: 30/06/2023
In addition to the meter breakdown/shutdown in the plant, there are various other reasons for the difference in between actual and estimated ERs. The main factor being the climatic factors like the wind speed and wind direction, that directly hampered the energy generation. Climatic factors are nature-borne and not under the control of the project proponent.				
Documentation provided by project participant				
NA				
VVB assessment				Date: 05/07/2023

PP has provided the valid justification regarding the breakdown occurred due to climatic conditions. Hence, CL is Closed.

Table 3. CAR from this verification

CAR ID	01	Section no.	4.4	Date: 24/06/2023
Description of CL				
The emission factor used for calculating the baseline emission in section 5.1 of the MR is not consistent with the registered VCS PD. Please make appropriate corrections.				
Project participant response				Date: 30/06/2023
The corresponding section 5.1 has been updated with the current emission factor.				
Documentation provided by project participant				
Revised Monitoring Report (Version 2.0)				
VVB assessment				Date: 05/07/2023
PP has made correction in emission factor in VCS MR version 2.0 dated 30/6/2023. Hence, CAR is closed.				

CAR ID	02	Section no.	4.2.2	Date: 24/06/2023
Description of CAR				
In section 2.2 of MR Version 1.0 dated 15/5/2023, inconsistency found in the registration of the grievance and the supporting documents provided against it. PP need to maintain the consistency as mentioned.				
Project participant response				Date: 30/06/2023
The corresponding section 2.2 has been updated.				
Documentation provided by project participant				
Revised Monitoring Report (Version 2.0)				
VVB assessment				Date: 05/07/2023

PP has provided the grievance register with minor grievance which does not relevant to the project activity. PP only need to mention and consider the grievances which affecting the project related activities in MR Version 2.0 dated 30/6/2023. Hence, CAR is not closed.	
Project participant response	Date: 14/07/2023
The corresponding section 2.2 has been re-updated.	
Documentation provided by project participant	
Revised Monitoring Report (Version 3.0)	
VVB assessment	Date: 17/7/2023
PP has corrected the section 2.2 and hence, CAR is closed.	

CAR ID	03	Section no.	NA	Date: 24/06/2023
Description of CAR				
In section 1.11 of MR Version 1.0 dated 15/5/2023, PP need to provide the missing data in Table 1: Sustainable Development Contributions.				
Project participant response				Date: 30/06/2023
The respective data has been now re-updated in the revised MR.				
Documentation provided by project participant				
Revised Monitoring Report (Version 2.0)				
VVB assessment				Date: 05/07/2023
PP need to provide the missing data in table. As PP does not provide the missing data, CAR is not Closed.				
Project participant response				Date: 14/07/2023
The respective data has now been updated in the revised MR.				
Documentation provided by project participant				
Revised Monitoring Report (Version 3.0)				
VVB assessment				Date: 17/7/2023
PP has provided the missing data in MR version 3.0 dated 6/7/2023/22/. Hence, CAR is closed.				

CAR ID	04	Section no.	4.4	Date: 24/06/2023
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Description of CAR	
In ER Sheet version 1.0 dated 15/5/2023. PP need to provide the calibration details.	
Project participant response	Date: 30/06/2023
The meter calibration details have been updated in the revised version of the ER Sheet.	
Documentation provided by project participant	
Revised Emission Reduction Sheet (Version 2.0)	
VVB assessment	Date: 05/07/2023
PP has provided the calibration detailed in the empty table made for the same and the provided data is consistent with the MR version dated 30/6/2023 and the calibration certificates. Hence, CAR is closed.	

CAR ID	05	Section no.	ER Sheet	Date: 24/06/2023
Description of CAR				
In ER Sheet version 1.0 dated 15/5/2023. PP need to provide the units to the attributes listed down in sheet named ER Comparison sheet.				
Project participant response				Date: 30/06/2023
The units corresponding to the attributes in the ER Comparison sheet have been updated.				
Documentation provided by project participant				
Revised Emission Reduction Sheet (Version 2.0)				
VVB assessment				Date: 05/07/2023
PP has provided the units to the attributes listed down in the ER sheet version 2.0 dated 30/6/2023, hence, CAR is Closed.				