

Verification and certification report form for GS project activities	
BASIC INFORMATION	
Title and GS reference number of the project activity	300 MW Wind Power Project in Gujarat by Alfamar Power
Reference Number	GS 7745
GS Version	GS4GG
Scale of the project activity	☒ Large-scale ☐ Small-scale
Version number of the verification and certification report	2.2
Completion date of the verification and certification report	10/03/2023
Monitoring period number and duration of this monitoring period	Monitoring period no: 1 Duration: 28/07/2020 - 30/04/2022
Version number of the monitoring report to which this report applies	03
Crediting period of the project activity corresponding to this monitoring period	28/07/2020 - 27/07/2025 (renewable)
Project participants	Alfamar Energy Private Limited
Host Party	India
Applied methodologies and standardized baselines	ACM0002: Grid connected electricity generation from renewable sources, Version 20
Sectoral scopes	Sectoral Scope 01
SDG Impact Certified	SDG 13: Renewable Electricity Generated -1,203,862 MWh SDG 8: Trainings provided to O&M staff – 7 Nos SDG 8: Cost Spent on O&M - 155.53 Mn INR SDG 8: Number of Jobs generated – 60 Nos SDG 13: Emission reduction - 1,125,127 VER
Name of the VVB	4K Earth Science Private Limited
Name, position and signature of the approver of the verification and certification report	S. Jagajothi  Director

SECTION A. Executive summary

4K Earth Science Private Limited (4KES) has been commissioned by “Kosher Climate India Private Limited” to perform an independent verification of its registered GS project “300 MW Wind Power Project in Gujarat by Alfanar Power”, GS Ref No: GS7745 for the reported GHG emission reductions for the given monitoring period 28/07/2020– 30/04/2022 (both dates included). The GS CDM projects must undergo independent third party verification and certification of emission reductions as the basis for issuance of Gold Standard Voluntary Emission Reductions (GS VERs)

The objectives of this verification exercise are, by review of objective evidence, to establish that:

- The project activity has been implemented and operated as per the registered PDD and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place;
- Monitoring report and other supporting documents are complete;
- The actual monitoring systems & procedures and monitoring report conforms with the requirements of the approved monitoring plan and the approved monitoring methodology;
- The data is recorded and stored as per the monitoring methodology and approved monitoring plan.

Scope:

The scope of the verification is the independent and objective review and ex post determination of the monitored reductions in GHG emission by the project activity. The verification is based on review of monitoring report, supporting information and

- (a) The registered GS PDD
- (b) The approved methodology mentioned in the GS PDD
- (c) The registered monitoring plan
- (d) Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board
- (e) Applicable GS4GG guidance
- (f) CDM Validation and Verification Standard (VVS)
- (g) All information and references relevant to the project activity’s resulting in emission reductions
- (h) Information related to monitoring of SDG parameters

The project is assessed against the requirements of the Gold Standard for Global Goals requirements and related rules and guidance.

4KES has based on the recommendations in the latest version of CDM Validation and Verification Standard, employed a rule-based approach in the verification, focusing on the identification of significant reporting risks and the reliability of project monitoring.

Description of project:

The project activity was allotted by Solar Energy Corporation of India (SECI) under interstate transmission system (ISTS) connected wind energy projects scheme, the Letter of Award (LoA) /2/ dt., 23/02/2018 for the 300 MW was awarded to ‘Alfanar Power’(parent company), whose registered office is located in Riyadh, Kingdom of Saudi Arabia (KSA). For the ease of construction, procurement, operation, and maintenance, the mother company ‘Alfanar Power’ registered the following subsidiary companies (legal entities) with the Registrar of Companies (ROC) Delhi, India:

- i) Alfanar Power Services Private Limited,
- ii) Alfanar Power Private Limited and,
- iii) Alfanar Energy Private Limited (Project Developer).

‘Alfanar Energy Private Limited’ the Project Developer has setup up wind power project with a total installed capacity of 301.4 MW in Kutch District, Gujarat. The project activity generates electricity and sells it to a designated consumer. The project activity installation comprises 114 Wind Turbine Generator (WTGs) of 2.20 MW each and 22 Nos. of WTGs of 2.30 MW each, the total consolidated capacity is 301.40 MW, and the total no. of WTGs is 136.

The commissioning of WTGs was done in a phased manner, the first set of installations 40 WTGs of 2.20 MW each were commissioned on 28/07/2020 and the last set of 6 WTGs (4 nos. x 2.2 MW and 2 nos. x 2.3

MW) were commissioned on 31/03/2021. The complete location details, coordinates and No. of WTGs are provided separately in Appendix 3 of this validation report. The project activity transmits power through a dedicated 33 kV and 220 kV transmission lines which is connected to the 220kV side of the 765/400/220 kV pooling station owned by Power Grid Corporation of India Ltd (PGCIL) located at Bhuj, Kutch District, Gujarat

Methodology:

4KES follows a rule based verification approach, wherein, as a first step, the contract review is undertaken as per latest version of CDM Accreditation Standard. Subsequently, after the contract is signed, the Gold Standard Verification work plan of the project activity is made available at Gold Standard registry in accordance with Gold Standard rules.

A desk review of the project documentation is undertaken, which is followed by site visit and interviews by the members of verification team in accordance with the latest version of CDM AS. The verification protocol is filled by the verification team that is based on standard auditing practices and latest version of CDM VVS, to capture the assessment of applicable CDM & GS requirements viz., latest version of CDM Project Standard, applicable GS4GG guidelines, registered GS-PDD, applied methodology/ies and/or tools and recent decisions. The verification protocol provides transparent means to record the observations and compliances by the verification team members and the nonconformities (CARs/CLs), if any. The verification protocol is an internal document, and is available on request. After successful closure of findings (CARs/CLs), the draft verification report is prepared which went through Independent technical review as per 4KES internal procedures and the TR comments were given for any gaps in audit findings. After closure of the TR comments, final verification report is prepared then followed by final approval for the decision made. The approved verification report is given to PP which shall be submitted for request for issuance.

Following are the major milestones for the verification under consideration.

Verification contract	17/05/2022
Site visit	30/06/2022
Draft Verification Report	02/06/2022
Final Verification Report	08/02/2023

SECTION B. Verification team, technical reviewer and approver

B.1. Verification team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Verification findings
1.	Team Leader/Technical Expert (1.2)/Local Expert	IR	S	Stalin	Central Office	x		x	x
2	Technical Expert (1.2)	IR	Sharma	Chetan	Central Office		x	x	x

Note: It shall be noted that the validation was undertaken by 4KES, however the verification audit team is entirely different from validation audit team. The validation team details are given below:

- Team Leader & TE (1.2) – Puratchikkanal Ma Paa

B.2. Technical reviewer and approver of the verification and certification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)
1.	Technical reviewer	IR	Badaya	Rohit	Central
2	Approver	IR	S	Jagajothi	Central

SECTION C. Application of materiality

C.1. Consideration of materiality in planning the verification

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	Transfer of data from sampling survey sheet to excel ER spreadsheet	Low	Possible human error during transfer of data to ER spreadsheets and MR	Thorough cross-check required on the transfer of data to the ER spreadsheet and MR.
2	Wrong data collection/misinterpretation of household situation	Low	It's not complicated monitoring process. Appropriate trainings are conducted for the monitoring personnel.	By means of interview with sample number of households.

C.2. Consideration of materiality in conducting the verification

The prescribed thresholds for materiality, as per as per §326 of VVS for PA, version 03/12/.

Prescribed range of ERs/annum	500,000+	300,000+ to 500,000	300,000	SSC PAs	MSC PAs
Prescribed Threshold	0.5%	1.0%	2.0%	5.0%	10.0%

The identified/selected materiality threshold for the project activity under current monitoring period is 0.5% as project activity is large scale with annual emission reduction is more than 500,000 VERs per annum.

	MR Version (Draft)	MR Version (Final)
Emission reductions/annum	1,127,383 tCO ₂ e	1,125,127 tCO ₂ e
Identified Threshold	5.0%	5.0%

The impact of errors observed during verification for each monitoring parameter on the emission reduction calculation is provided below:

Parameter	Verification approach	Error identified	Corrected	Within Threshold
EGPJ, grid, y or EGPJ, facility, l, y	Complete data check	No error identified	NA	Yes

However, PP applied maximum possible error of 0.2% for the calibration non-validity period that resulted in decrease in emission reduction

SECTION D. Means of verification

D.1. Desk/document review

The verification is performed primarily as a desk review of the documents submitted at various stages of assessments. The review is performed by assessment team using verification protocols (checklists). The assessment team cross-checked the information provided in the MR and information from sources other than

those used, if available, and also conducts independent background investigations. 4KES conducted a desk review, involving but not limited to,

- A review of the data and information presented to verify their completeness;
- A review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures;
- A review of calculations and assumptions made in determining the GHG data and emission reductions;
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

The list of documents reviewed is included in the section 'Appendix 3' of this report.

D.2. On-site inspection

Duration of on-site inspection: 30/06/2022				
No.	Activity performed on-site	Site location	Date	Team member
1.	Opening Meeting, Office Inspection, Verification of monitoring records, interviews and database inspection	Site office	30/06/2022	Stalin S
2.	Plant visit and interview with stakeholders	Site	30/06/2022	Stalin S
3	Closing meeting	Site office	30/06/2022	Stalin S

D.3. Interviews

No.	Interviewee			Date	Subject
	Last name	First name	Affiliation		
1.	Tiwari	Honey	Head Business Development, Alfamar,	30/06/2022	- General aspects of the project - Quality management system - Involved personnel and responsibilities - Training and practice of the operational personnel - Implementation of the monitoring plan - Monitoring data management - Data uncertainty and residual risks - Procedural aspects of the Monitoring - Calibration
2	Jindal	Sachin	Project Control Manager, Alfamar	30/06/2022	
3	Mohammed	Jehangir	Project Manager, Alfamar	30/06/2022	
4	Bellapu	Nagaraju	Kosher Climate	30/06/2022	- Data analysis - ER Calculations - MR editorial issues
5	-	Jagadish	Local Stakeholder	30/06/2022	- SDG benefits - Impact of project - Grievances
6	Gopalji	Sodakarshanti	Local Stakeholder	30/06/2022	
7	M	Barasara	Local Stakeholder	30/06/2022	

The summary of interviews with local stakeholders are given below:

Name: Mr. Jagadish
Question: Is there any employment provided to local people?
Answer: Yes, local people got employed in O&M team and by Security agency in the project
Question: Is there any economic benefits due to the projects?
Answer: I am a taxi driver. After the project implementation I regularly get rental compared to pre project situation.
Question: Is there any issue of noise or shadow flickering due to the operation of wind turbine?
Answer: No, all the wind turbines are located far away from the settlements as you can see. So, there no such issues

Name: Mr. Sodakarshanji Gopalji (security)
Question: Is salary offered by PP is on par with standard snarly in the project area and is it paid regularly?
Answer: Yes, the salary paid is better than other places and salaries are paid monthly on time.
Question: Is there any impact to the agriculture due to the project?
Answer: No considerable impact to agriculture as the land is used for the project activity is a categorised as waste land and most of the land is purchased from government.
Question: Do you have any other issue with the project?
Answer: No

Name: Mr. Barasara
Question: Is there any issue of soil erosion or impact on water bodies due to the project?
Answer: The project is located in dry land. So, there is no issue of soil erosion or water body pollution.
Question: What you like about the project?
Answer: The project generates green electricity and provides employment for local people. Also, the community development activities undertaken by PP such as laying of roads, installing oxygen generation plant for COVID patients and providing COVID relief materials etc. is very useful for local people.
Question: What you don't like about the project?
Answer: None

D.4. Sampling approach

Not applicable

D.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form	1	1	-
FARs from previous validation/verification	-	1	1
Compliance of the project implementation and operation with the registered PDD	-	-	-
Post-registration changes	-	-	-

Compliance of the registered monitoring plan with the methodologies including applicable tools and standardized baselines	-	1	-
Compliance of monitoring activities with the registered monitoring plan	-	-	-
Compliance with the calibration frequency requirements for measuring instruments	1	-	-
Assessment of data and calculation of emission reductions or net removals	-	-	-
Assessment of reported other SDG benefits	2	-	-
Stakeholder Inputs & Legal Dispute	-	-	-
Others	-	1	-
Total	4	4	1

SECTION E. Verification findings

E.1. Compliance of the monitoring report with the monitoring report form

Means of verification	The project is transferred to GS4GG, and PP used GS monitoring report template, version 1.1 /9/which is a valid version. All the sections of the form were filled as per the GS4GG guidelines and gave all the relevant details.
Findings	CL-01 & CAR-01 are raised and closed satisfactorily
Conclusion	The monitoring report is prepared based on the Version 1.1 GS4GG monitoring report template which is valid at the time of assessment. All sections of the MR is filled correctly.

E.2. Remaining forward action requests from validation and/or previous verifications

Means of verification	This is the 1 st verification of the project activity. Verification team checked the following reports for any pending issues from validation: - GS validation report/4/ - GS design review report/5/ FAR raised in validation report:		
	FAR	Description of FAR	Response
	FAR#1:	The PP due to prevailing pandemic Covid-19 and constraints caused to Nation Wide lockdown has not been able to perform the Stakeholder Consultation, "Covid-19 Interim measures" (Version 4, Dt.,17.05.2021) relaxation has been allowed on conducting physical stakeholder consultation until the covid-19 situation eases. As per paragraph 2.1.1 'Alternative Measures' - The project developer may postpone physical stakeholder consultation meetings and the Stakeholder Feedback Round (SFR) for Gold Standard project/POA/VPAs until the COVID-19 situation eases.	PD conducted LSC meeting on 7 th October 2022. PD has submitted the stakeholder consultation meeting report The assessment has been provided in section E.11. Hence FAR-01 is closed.
	FARs raised in the design review report:		
	FAR	Description of FAR	Response of Project Owner
	FAR#1:	Verifying VVB shall address preliminary review FARs 1,2,3 after physical LSC Is conducted.	The FARs 1,2 & 3 from the preliminary review report are addressed below.
	FAR#2:	Remote site visit shall be	Verification team conducted

	resumed by VVB when Covid-19 situation eases.	physical site visit on 30 th June 2022 and the details are provided section D.2 & D3 above.
FAR#3:	As per E.2 of PDD, adopted grievance mechanism means shall be announced for stakeholders, that It is activated, as soon as possible. Verifying VVB shall verify the same, availability and easy access of the means.	As per the response provided above Physical LSC has not been conducted yet. Means of grievance mechanism will be announced during the LSC meeting which is being planned to conduct in 2 nd week of July 2022.
FAR#4:	PD shall conduct the physical meetings or stakeholder feedback round as soon as the COVID situation eases. VVB shall confirm if the physical meeting is conducted it should be in line with Gold Standard Stakeholder Consultation and Engagement Requirements.	PD conducted physical stakeholder meeting on 7 th October 2022. PD has submitted the stakeholder consultation meeting report. From verification of the LSC report and verification of supporting documents, it is confirmed that the stakeholder meeting is conducted in line with Gold Standard Stakeholder Consultation and Engagement Requirements. The assessment has been provided in section E.11. .

FARs raised in the preliminary review report:

FAR	Description of FAR	Response of Project Owner
FAR#1:	PP shall conduct the physical meetings and stakeholder feedback round as soon as the COVID situation eases. VVB shall confirm the physical meeting is in line with Gold Standard Stakeholder Consultation and Engagement Requirements (version 1.2 dated October 2019)	PD conducted physical meeting on 7 th October 2022 in line with Gold Standard Stakeholder Consultation and Engagement Requirements (version 1.2 dated October 2019). PD has submitted the stakeholder consultation meeting report. The assessment has been provided in section E.11.
FAR#2:	Stakeholders Consultation Report: - The project developer shall invite stakeholders from all categories A to G mentioned in paragraph 3.1.1 in the "Stakeholder Consultation and Engagement Requirements" guidelines. - The invitation for the consultation meeting shall be given at least 30 days before the meeting takes place. - PP shall provide the original versions of evaluation forms and 4-5 representative samples of the evaluation forms in English. PP shall ensure that the blind sustainable development	From verification of Stakeholders Consultation Report & supporting documents the following is confirmed: - The project developer invited stakeholders from all categories A to G mentioned in paragraph 3.1.1 in the "Stakeholder Consultation and Engagement Requirements" guidelines. - The invitation for the consultation meeting are given at least 30 days before the meeting takes place. - PP provided the original versions of evaluation forms and 4-5 representative samples of the evaluation forms in English.

		assessment is conducted in the consultation meeting.	From verification of agenda & interview with PD, it is confirmed that PD also conducted the blind sustainable development assessment is conducted in the consultation meeting.
	FAR#3:	Design of the Stakeholder Feedback Round: - The PP shall conduct Stakeholder Feedback Round lasting minimum of 2 months and the requested documents shall be public available for global consultation. - All the attendees of LSC meeting shall be invited for further feedback/comment during SFR.	PD has started the SFR round from 21/12/2022 to 21/02/2023. The emails invitations sent to stakeholders to all stakeholder who were invited for LSC meeting for further feedback/comment. Nevertheless, FAR1 is raised to check how the comments received during SFR are addressed by PD in the next verification.
Findings	CAR-03 is raised and closed satisfactorily		
Conclusion	The FAR raised in the validation report & design review report is closed for this verification. FAR-01 is raised to check the LSC process in the next verification.		

E.3. Compliance of the project implementation and operation with the registered project design document

Means of verification	The verification team determined the conformity of the actual project activity and its operation with the validated project design document. Verification team has, by means of a desk review and an on-site visit, assessed that all physical features of the GS project activity proposed in the registered PDD/3/ are in place, and that the project participants have operated the GS project activity as per the registered PDD/3/. The verification team has checked the information in the monitoring report and compared against the registered PDD. During the onsite inspection, the verification team has checked the project locations, implementation, technology applied, project equipment, and monitoring system against the information in the registered PDD. Interviews with operational personnel and stakeholders have been carried out.
Findings	No finding
Conclusion	The verification team concludes that the project activity was implemented and operated as per registered PDD. The verification team, based on the site visit and document review, was able to conclude that the project activity has been commissioned and implemented as per the registered PDD/3/ and that all physical features of the project are in place.

E.4. Post-registration changes

E.4.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents¹

During the monitoring period PD has sought deviation from Appendix of 'CDM Validation and Verification standard for Project Activities' Version 3 while applying maximum possible error for the

¹ Other standards, methodologies, methodological tools and guidelines (to be) applied in accordance with the applied(selected) methodologies are collectively referred to as the other (applied) methodological regulatory documents).

calibration non-validity period. As per the Appendix of VVS v3, the maximum possible error shall be applied both electricity export & import.

But in the monthly energy meter reading statement, the DISCOM does not provide export & import details, but directly provides the net generation. As, the export & import details are not available with PD, PD applied maximum possible error only on the net export as described below:

Parameter	Measured Value	Corrected Value
Net Export	X	$X \times (1 - 0.2\%)$

This approach is found to be acceptable considering the data non-availability

No other temporary deviation from the registered monitoring plan is sought in this verification.

E.4.2. Corrections

No correction is sought in this verification.

E.4.3. Changes to the start date of the crediting period

No changes to the start date of the crediting period is sought.

E.4.4. Inclusion of a monitoring plan

Monitoring plan was already included in the approved PDD. Hence, not applicable.

E.4.5. Permanent changes from registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents

No permanent changes or deviation in the registered monitoring plan is sought

E.4.6. Changes to the project design

No change in project design is sought in this monitoring

E.4.7. Changes specific to afforestation and reforestation project activities

Not applicable

E.5. Compliance of the registered monitoring plan with applied methodologies, applied standardized baselines, and other applied methodological regulatory documents

Means of verification	The verification team checked compliance of project monitoring plan with the applied methodology (ACM002, version 20) and including applicable tools.
Findings	CAR-02 is raised and closed satisfactorily
Conclusion	All parameters stated in the monitoring plan and the applied methodology has been fulfilled in the current monitoring report. All baseline emission parameters have been verified and found satisfactory. The discussion regarding each parameter has been elaborated in the further sections of this report. The monitoring plan as mentioned in the registered PDD is in accordance with the applied methodology. In the opinion of the verification team the monitoring report complies with the requirement of the registered PDD/3/ and applied methodology /6/ in the context of the project activity. Thus, it conforms to the requirement of VVS for PA, version 03 .

E.6. Compliance of monitoring activities with the registered monitoring plan

E.6.1. Data and parameters fixed ex ante or at renewal of crediting period

Means of verification	The verification team has checked the ex-ante parameters and data stated in
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	Section D.1 of MR and compared with section B.6.2 of the registered PDD/3/ whether all parameters fixed ex-ante for the crediting period have been applied correctly.		
	Ex-ante Parameter	Value	Consistent with the PDD/3/ & the source mentioned in it
	EF _{grid, OM, y}	0.9568 tCO ₂ /MWh	Yes
	EF _{grid, BM, y}	0.8682 tCO ₂ /MWh	Yes
	EF _{grid, CM, y}	0.9346 tCO ₂ /MWh	Yes
Findings	No finding		
Conclusion	The values of ex ante fixed parameters have been verified from the registered PDD/3/. Same has been crosschecked with the source mentioned in the PDD and found to be consistent. The verification team confirms that the values used/applied are correct and justified. Also, the ex-ante values have been correctly applied in the calculation of emission reductions.		

E.6.2. Data and parameters monitored

Means of verification	The verification team has determined whether the registered monitoring plan has been properly implemented and followed by the PP that the monitoring has been carried out in accordance with the registered monitoring plan; and determined whether all parameters including project emission parameters, baseline emission parameters and leakage parameters used for emission reduction calculation stated in the registered monitoring plan are monitored or used appropriately as per the registered PDD. During the verification all monitoring parameters listed in Section D.2 of MR were compared with section B.7.1 of the registered PDD have been verified with regard to the: (i) appropriateness of the applied measurement / determination method, (ii) the correctness of the values applied for ER calculation, (iii) the accuracy, and applied QA/QC measures. The monitored values are assessed as follows: $EG_{PJ, grid, y}$ or $EG_{PJ, facility, l, y}$: The parameter “Net quantity of electricity exported to the grid by the project activity during the year y” is monitored continuously (and recorded monthly). has been verified against monthly joint meter reading statement issued/15/ by GEDA/GETCO/WRPC and it is crosschecked with the monthly electricity sale invoices/15/. No discrepancy found in any of the records. The meter reading is also published in Western Regional Power Corporation website² which is also verified and confirmed that all values are consistent. Hence, the value considered in the MR is correct.
Findings	No finding
Conclusion	Corresponding to the VVS for PA V03/12/, the team confirm that the monitoring has been carried out in accordance with the registered PDD/3/. The monitoring system is in compliance with the information flow for the parameters as mentioned in monitoring plan in registered PDD/3/. The monitored data for the parameters has been verified by checking the procedure for information flow and

E.6.2.1. Implementation of sampling plan

Means of verification	No sampling involved in monitoring. Hence not applicable
Findings	NA
Conclusion	NA

² http://www.wrpc.gov.in/COMMERCIAL_REA.ASP?In=e

E.7. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	The calibration details such as make, accuracy class serial number is as per the meter available onsite which was shared by PP and checked by verification team and found the details in line with approved PDD. However, only the 1 st calibration certificates/16/ provided by the equipment manufacture is available with PP. The summary of meter details & calibration details which are verified from site and verification of calibration certificate are given below:			
	Sr. No	05296063	05296072	05296111
	Make	Elster	Elster	Elster
	Type	ABT 3P4W	ABT 3P4W	ABT 3P4W
	Class	0.2S	0.2S	0.2S
	Last Calibration	17/12/2015	18/12/2015	18/12/2015
	Calibration Due	16/12/2020	17/12/2020	17/12/2020
		The further, the calibration details are not available with PP as the energy meters are property of DISCOM and PP do not have access of calibration certificates. Nevertheless, PP has used maximum possible error of 0.2% for the period when the validation of calibration cannot be proved which is found to be appropriate. The calibration is valid only till 16/12/2020. So, the calibration is not valid for the period 17/12/2020 to 30/04/2022. However, the error of 0.2% is applied for entire monitoring period as conservative option. The calculation is checked and found to be correct. However, it shall be noted that PD applied maximum possible error only on the net export as the export & import details are not available with PD as the joint meter reading statement directly provides the net electricity. This is a deviation from Appendix of 'CDM Validation and Verification standard for Project Activities' Version. The assessment is provided in section E.4.1		
Findings	CL-02 is raised and closed satisfactorily.			
Conclusion	Validation confirms that the calibration is conducted at the frequency following the relevant industry standard as specified by the methodology and the monitoring plan contained in the registered PDD.			

E.8. Assessment of data and calculation of emission reductions or net removals

E.8.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	As per the methodology the emission reduction is directly calculated. Baseline & Project emissions are not calculated separately. The verification team has checked whether calculations of GHG emission reduction calculation have been carried out in accordance with the formulae and methods described in the registered monitoring plan. In detail the following has been verified: <u>Transparency:</u> It has been checked whether the calculation of baseline emissions is fully traceable and, where used, the Excel calculation provides all calculation formulae. <u>Parameter consistency:</u> It has been checked whether all internal and external parameters and data used for the calculation are applied consistently in the monitoring report and the calculation spreadsheet. <u>Correctness:</u> It has been checked whether the applied formulae and methods for calculating baseline emissions are in accordance with the monitoring plan and the approved methodology.
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Completeness: It has been checked whether all calculations are complete and without omissions

PP has submitted the calculation in the excel sheet/2/. The baseline calculation in the excel sheet is checked whether the calculation is in accordance with the formula given in the approved PDD/3/ and the selected methodologies/6/.

After verifying the reported figures with the raw data sources, it's confirmed that the values of the parameters from the raw data sources are consistent with those quoted in the Monitoring Report Version 02 and corresponding ER calculation spreadsheets. The verification process for the same has been clearly described in above section of the report. See below for the detailed data:

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

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

BE_y = Baseline emissions in year y (tCO₂/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 CDM project activity in year y (MWh/yr).

$EF_{grid,CM,y}$ = Combined margin CO₂ emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the Emission Factor for an electricity system".

As per para 41 of ACM0002, version 20 when the project activity is installation of Greenfield power plant, then:

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

Where,

$EG_{facility,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr).

Year	$EG_{PJ,y}$ or $EG_{facility,y}$ (MWh)	$EF_{grid,CM,y}$ (tCO ₂ /MWh)	BE_y (tCO ₂)*
2020	173,518	0.9346	162,169
2021	772,479	0.9346	721,958
2022	257,865	0.9346	241,000
TOTAL	1,203,862	0.9346	1,125,127

*rounded down values

Findings

No finding

Conclusion

The verification team confirms the following:

- The calculations of baseline GHG emissions have been carried out in accordance with the equations and methods described in the registered monitoring plan and applied methodology. The verification team is able to confirm that the parameters are in line with the VVS for PA, Version 03 para 373
- The emission factor applied is an ex-ante value valid for the fixed crediting period.
- Any assumptions used in emission or removal calculations have been justified.
- Appropriate emission factor and other reference values have been correctly.
- Hence the baseline emission calculated for the monitoring period (ie,

1,125,127 tCO₂e) is correct

E.8.2. Calculation of project GHG emissions or actual net anthropogenic GHG removals by sinks

Means of verification	The project is a wind power generation project which does not involve any project emissions from fossil fuel, operation of dry, flash steam or binary geothermal power plants, and from water reservoirs of hydro power plants. Hence the PE _y = 0
Findings	No finding
Conclusion	As per the approved PDD, the project emission is considered as zero which is found to be correct.

E.8.3. Calculation of leakage GHG emissions

Means of verification	As per the applied methodology, for wind project there is no leakage emission involved. Hence LE _y = 0
Findings	No finding
Conclusion	The leakage emission is considered as zero which is found to be appropriate for the wind project.

E.8.4. Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

Means of verification	MR demonstrates the summary of GHG emission reductions for the monitoring period and calculated according to the applied methodologies as follows:				
	$ER_y = BE_y - PE_y - LE_y$				
	Year	BE _y (tCO ₂)	PE _y (tCO ₂)	LE _y (tCO ₂)	ER _y (tCO ₂)
	2020	162,169	0	0	162,169
	2021	721,958	0	0	721,958
	2022	241,000	0	0	241,000
	TOTAL	1,125,127	0	0	1,125,127
	The ER calculation sheet and monitoring report is verified to check the calculation.				
Findings	No finding				
Conclusion	The verification team confirms the following: • The emission reduction value reported is verified to be correct. • The summary table in the MR has been filled correctly and the values are in line with the related emissions reduction spreadsheet. • The verification team is able to confirm that the parameters are in line with the VVS Version 03 section 373.				

E.8.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Means of verification	The verification team has checked whether the MR includes a comparison of actual values of the monitoring period with the estimations in the registered PDD/3/. Section E.5 of the MR includes a comparison of the calculated actual emission reductions with the ex-ante calculated values in the registered PDD	
	Emission reduction estimated as per the approved PDD/3/	Actual emission reduction achieved as per Monitoring report/1/
	1,720,910 t CO ₂ e	1,125,127 t CO ₂ e

	The actual emission reduction achieved during the monitoring period is less than the estimation in the PDD.
Findings	No finding
Conclusion	The estimated emission reduction as per PDD and the actual emission reduction achieved for the monitoring period are correctly reported in the section E.5 of MR. Since the actual ER is less than estimated ER, hence no justification is required.

E.8.6. Remarks on difference from estimated value in registered PDD

Means of verification	The verification team has determined the GS VER achieved during this monitoring period with the estimated value and reason for increase if any.
Findings	No finding
Conclusion	The actual achieved emission reduction is less than the PDD estimation. Hence no justification is required.

E.9. Assessment of reported other SDG benefits

Relevant SDG	SDG 7				
Parameter	EG _{PJ,grid,y} or EG _{PJ,facility,I,y} : Net quantity of electricity exported to the grid by the project activity during the year y				
Source	Joint energy meter reading statement issued by GEDA/GETCO				
Monitored Value	1,203,862 MWh (after adjustment of 0.2% error)				
Means of verification	The monthly energy meter readings are taken from the energy meter installed at the substation and the energy meter details are given below:				
	Sr. No	05296063	05296072	05296111	
	Make	Elster	Elster	Elster	
	Type	ABT 3P4W	ABT 3P4W	ABT 3P4W	
	Class	0.2S	0.2S	0.2S	
	The energy meter details are verified during site visit.				
	This has been verified against monthly joint meter reading statement issued/15/ by GEDA/GETCO/WRPC and it is crosschecked with the monthly electricity sale invoices/15/. No discrepancy found in any of the records. The meter reading is also published in Western Regional Power Corporation website ³ which is also verified and confirmed that all values are consistent. Hence, the value considered in the MR is correct				
Findings	CL-03 is raised and closed satisfactorily				
Conclusion	The parameter is monitored appropriately, in accordance with the registered monitoring plan. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. All the monitored parameter values reported in the MR are found to be correct.				
	Parameter	Baseline Estimate	Project Estimate	Net Benefit	Estimated Value as per PDD
	EG _{PJ,facility,I,y} :	0	1,203,862 MWh	1,203,862 MWh	2,117,477
	The estimated value is calculated based on the annual average value estimated in PDD and number of days in the monitoring period. The calculation is verified and found to be correct. The actual value achieved is less than estimated value. Hence not iustification is required.				

Relevant SDG	SDG 8
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³ http://www.wrpc.gov.in/COMMERCIAL_REA.ASP?In=e

Parameter description	Trainings provided to employees and O&M staff.			
Source	Training records			
Monitored Value	7			
Means of verification	The training records of O&M Team/21/ are verified and found that the data reported in MR is correct. It is also confirmed through interview with employees during the site visit.			
Findings	No finding			
Conclusion	The parameter is monitored appropriately, in accordance with the registered monitoring plan. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. All the monitored parameter values reported in the MR are found to be correct.			
	Parameter	Baseline value	Project Value	Estimated Value as per PDD
	Training	0	7	4
The estimated value is calculated based on the annual average value estimated in PDD and number of days in the monitoring period. The calculation is verified and found to be correct. The actual value achieved is less than estimated value. Hence not justification is required.				

Relevant SDG	SDG 8			
Parameter description	Total employment generated due to the implementation of project activity and The amount spent for O&M activities due to the project			
Source	Employment records			
Monitored Value	Employment generated – 60 Total O&M Cost spent - 155.53 Mn INR			
Means of verification	The employment records of PP/21/ are verified and found that the number of jobs reported in MR is correct. Also the O&M contract is verified against the O&M contract/23/ and found that the O&M cost is correct.			
Findings	CL-04 is raised and closed satisfactorily			
Conclusion	The parameter is monitored appropriately, in accordance with the registered monitoring plan. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. All the monitored parameter values reported in the MR are found to be correct.			
	Parameter	Baseline value	Project Value	Estimated Value as per PDD
	Employment generation	0	60	100
	O&M Cost Spent	0	155.53 Mn INR	273
	It is noted that the during the registration of project PD considered job opportunities of 100 whilst 60 people are employed during monitoring period. As discussed with PD, number of job opportunities considered in the PDD includes the temporary jobs. But, no records available for temporary job option as it changes very often, the same is not considered for reporting by PP. As PD claims only the actual permanent jobs, it is found to be acceptable. Also the O&M cost for initial years are less due to warranty by the manufacture whereas the estimated value is the annual average of the crediting period. Hence the actual O&M cost value achieved is less than the estimated value. The estimated value is calculated based on the annual average value estimated in PDD and number of days in the monitoring period. The calculation is verified and found to be correct. The actual value achieved is less than estimated value. Hence not justification is required.			

Relevant SDG	SDG 13
Parameter description	GHG Emission Reduction

Source	ER Calculation sheet			
Monitored Value	1,125,127 tCO ₂			
Means of verification	Refer section E.8			
Findings	No finding			
Conclusion	The parameter is monitored appropriately, in accordance with the registered monitoring plan. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. All the monitored parameter values reported in the MR are found to be correct.			
	Parameter	Baseline value	Project Value	Estimated value as per PDD
	GHG Emission Reduction	0	1,125,127 tCO ₂	1,125,127 tCO ₂
The estimated value is calculated based on the annual average value estimated in PDD and number of days in the monitoring period. The calculation is verified and found to be correct. The actual value achieved is less than estimated value. Hence not justification is required.				

E.10. Safeguards reporting

Safeguarding Principle	8.2: Erosion and/or Water Body Instability
Parameter	Soil Erosion control
Mitigation Measures followed	- The excavated areas were kept minimum and construction activities restricted to dry months to avoid heavy rainfall. - Using existing roads and lanes used by landowner. - Stockpiles of materials were placed away from drainage lines and formed with sediment control structures placed immediately down slope. - Construction debris and excavated material were cleared up at regular intervals. - Excavated material stockpiled and used for backfilling of foundations, platforms etc. - Minimization of traffic in construction zones and use of a dedicated parking area, i.e, site compound. - Re-vegetation taken up as necessary after construction, in order to reduce the risk of soil erosion.
Means of verification	Through site visit observation, interview with site in-charge and verification of O&M HSE logbook/20/ & construction photographs it is confirmed that the mitigation measures mentioned in PDD are followed during the construction & operation of the plant.
Findings	No finding
Conclusion	PP followed all mitigation measures during construction and operation of the plant.

Safeguarding Principle	9.5: Hazardous and Non-hazardous Waste
Parameter	Hazardous waste management
Mitigation Measures followed	- The hazardous waste generated at the site was handed over to authorized vendor at regular intervals. - A hazardous waste inventory is maintained as per the provisions of the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008.
Means of verification	Through site visit observation and interview with site in-charge it is confirmed that the Hazardous waste generated at site are managed properly. Also the waste generation log records have been verified/18/. From verification of Hazardous

	Waste disposal Forms/19/, it is confirmed that hazardous waste were regularly handed over to Ruchika Waste Management Company, a accredited waste management company. Also from verification of waste inventory maintained at site, all waste including hazardous waste are managed properly as per Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008.
Findings	No finding
Conclusion	PP followed all mitigation measures during construction and operation of the plant.

Safeguarding Principle	9.11: Endangered Species
Parameter	Bird and Bat deaths
Mitigation Measures followed	During the siting activity, it was ensured that there are no water bodies beside WTGs. • Water pits are not allowed around the WTGs. • The bird carcass is also monitored two times in a week. • None of the area of WTGs erection or transmission lines are under sensitive or under areas of conservation importance.
Means of verification	Through site visit observation and interview with site in-charge and verification of ESIA report/24/ it is confirmed that the above mitigation measures are followed at the time of site setting. Also PP maintains the bird strike register/17/ which is verified and found that no bird strike is reported during the monitoring period.
Findings	CAR-04 is raised and closed satisfactorily
Conclusion	PP followed all mitigation measures during construction and operation of the plant.

E.11. Stakeholder Inputs & Legal Dispute

Means of verification	As PD has not conducted physical stakeholder meeting before design certification and the same is conducted on 7th October 2022, between 11:00 AM -2:00 PM at Site office, Laxmipar Village, Nakhatrana Taluka, Kutch District, Gujarat, India. The meeting was conducted for the purpose of Gold Standard. PD submitted the Gold Standard stakeholder consultation report/25/. During the meeting PD representatives explained about the project and clarified all the questions of stakeholders. As verified from the minutes of the stakeholder meeting, PD conducted blind SDG assessment. During meeting PD also discussed the grievance mechanism that is already in place. The assessment team checked the report including the invitations sent, meeting minutes, attendance sheet, photographs and feedback forms. As per the report, all the questions asked by stakeholders are clarified by PD and no negative comments received from the stakeholders. A stakeholder feedback round is started on 21/12/2022 and it will be open 21/02/2023 (which is 2 months) to solicit additional comments on the stakeholder consultation meeting. Emails/26/ were sent along with the documents of stakeholder consultation report and all the stakeholder invited for physical stakeholder consultation meeting. Also, PD confirmed a hard copy of stakeholder consultation report was kept at Panchayat office & site office for the local people to provide comments. As the commenting period is not over yet, FAR-01 is raised for next verification to check how comments raised during SFR round are addressed by PD. As per the GS requirements, a continuous input and grievance mechanism is in place for the project. Validation team checked the grievance/complaints registers
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	and discussed with the PP regarding the grievance reporting mechanisms. Validation team also interviewed the end users during the remote audit and confirmed the end users are aware of the grievances mechanism in place. As verified from the site the Grievance/complaint register is kept at the security office in the site which is easily accessible to all public. Validation team finds that the grievance mechanisms in place are adequate and the stakeholders are aware of the grievance mechanisms. Verification team checked the complaints register of the monitoring period and confirmed that no grievances received during the monitoring period. Verification team checked with PP whether any legal consent or dispute arise during the monitoring period and PPs also confirmed that there are such no legal contests or dispute that has arisen with the project during the monitoring period. Verification team also interviewed stakeholders and independently checked through Google to check any legal dispute ongoing with PP and found no such legal dispute is pending.
Findings	No finding
Conclusion	The verification team confirms the following: • The physical stakeholder meeting was conducted on 7th October 2022 line with the GS4GG Stakeholder Consultation and Engagement Requirements, V1.2.. • Continuous input and grievance mechanism in place is found be adequate • No grievances received during the current or previous monitoring period • No legal consent or dispute arise during the monitoring period.

SECTION F. Internal quality control

The draft verification report prepared by team leader is reviewed by an independent technical reviewer (having competence of relevant technical area himself/herself or through an independent technical area expert) to confirm the internal procedures established by 4KES are duly followed and the verification report/opinion is reached in an objective manner and complies with the applicable Gold Standard & CDM requirements.

The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team are independent of the verification team. The independent technical reviewer(s) may approve or reject the draft verification report. The findings may be identified even at this stage, which needs to be satisfactorily resolved, before submit final report to Client/Gold Standard. The final approval decision is taken by the Head of the DOE/Director.

The final decision is authorized by the Director, 4KES, once the report is finalized by the Head of the DOE/DOE Manager.

SECTION G. Verification opinion

The verification team confirms that the the evidence is of sufficient quantity, appropriate quality and reliable. The reported values, notation, units and sources in the monitoring report for all the monitoring parameters have been cross checked with the emission reduction sheet and monitoring report. During the course of verification, the data submitted by PP was cross verified with the values mentioned in the emission reduction sheet/2/ and monitoring report/1/. The procedure for data monitoring, recording, transfer and compilation was also verified and found in compliance with the monitoring plan as mentioned in the approved revised PDD/3/.

Evidences (Documents/interview/site visit) referred for verification of individual monitoring parameter and fixed parameters are defined in section E.6 above. It is confirmed by the assessment team that the reported emission reductions have been conservatively calculated. A list of referred documents for verification is also included in Appendix 3 of this report.

Based on the information seen and evaluated we confirm that the implementation of the project has resulted in 1,125,127 tCO₂e emission reductions during period 28/07/2020– 30/04/2022.

SECTION H. Certification statement

4K Earth Science Private Limited has been contracted by “Kosher Climate India Private Limited” to undertake independent verification and certification for the greenhouse gas (GHG) emission reductions reported and the contribution to sustainable development indicators from the GS Project activity “300 MW Wind Power Project in Gujarat by Alfano Power” and GS Ref# GS7745 for the monitoring period 28/07/2020– 30/04/2022 (including both dates) in the GS Monitoring Report Version 01 (first version) dated 16/05/2022.

The verification is based on the revised GS PDD and the GS monitoring report for this project. Our verification approach was based on the requirements as defined under the Kyoto Protocol, Marrakech accord, as well as those defined by the Gold Standard Board.

The management of the ‘Alfano Energy Private Limited’ is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions & monitoring of SDG parameters on the basis set out within the project Final GS Monitoring Report Version 3 dated 21/12/2022. The calculation and determination of GHG emission reductions from the project is the responsibility of the management of the ‘Kosher Climate India Private Limited’. The development and maintenance of records and reporting procedures are in accordance with the GS Monitoring Report Version 3 dated 21/12/2022

In our opinion the GHG emissions reductions reported for the project activity are fairly stated in the GS Monitoring Report (final) Version 3, dated 21/12/2022. 4KES based on outcome of verification activities, certifies in writing that, during the monitoring period 28/07/2020– 30/04/2022 (including both days), the registered GS project activity “300 MW Wind Power Project in Gujarat by Alfano Power” in the registered GS PA achieved the voluntary Emission Reductions of 1,125,127 tCO₂e reductions in anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the PA

The voluntary emission reduction during the monitoring period 28/07/2020– 30/04/2022 (including both dates) is stated below:

Vintage	Duration	Gold Standard Voluntary emission reductions (tCO ₂ e)
2020	28/07/2020– 31/12/2020	162,169
2021	01/01/2021 – 31/12/2021	721,958
2022	01/01/2022– 30/04/2022	241,000
Total	28/07/2020– 30/04/2022	1,125,127

Appendix 1. Abbreviations

Abbreviations	Full texts
4KES	4K Earth Science Pvt. Ltd
BE	Baseline Emissions
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CH ₄	Methane
CL	Clarification Request
CO ₂ e	Carbon dioxide equivalent
DOE	Designated Operating Entity
EF	Emission Factor
ERs	Emission Reductions
FAR	Forward Action Request
FT	Field Test
GHGs	Greenhouse Gas(es)
GS	Gold Standard
GWP	Global Warming Potential
HH	Household
ISO	International Organization of Standardization
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
KPT	Kitchen Performance Test
LE	Leakage Emissions
LPG	Liquefied Petroleum Gas
MDG	Millennium Development Goal
MP	Monitoring Plan
MR	Monitoring Report
NCV	Net Calorific Value
NGO	Non Governmental Organisation
NRB	Non Renewable Biomass
PE	Project Emissions
PDD	Project Design Document
PS	Project Standard
PCIA	Partnership for Clean Indoor Air
PCP	Project Cycle Procedure
SD	Sustainable Development
SDG	Sustainable Development Goal
SHG	Self Help Group
QA/QC	Quality Assurance/Quality Control
UNFCCC	United Nations Framework Convention on Climate Change
VER	Voluntary Emission Reduction
VVB	Validation and Verification Body
VVS	Validation & Verification Standard

Appendix 2. Competence of team members and technical reviewers

<u>Certificate of Competence</u>						
Name	☒ Mr. ☐ Ms.	Stalin S				
Qualification Procedure	Fulfil the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GHG Projects.					
Appointed to work as:						
	CDM Validator/Verifier	Team Leader	Team Member	Technical Expert	Technical Reviewer	Financial Expert
<i>Appointed</i>	Yes	Yes	Yes	Yes	Yes	No
<i>Appointed Date</i>	30-04-2022					
Authorized to work as Technical Expert for:						
<i>Authorized Technical Area</i>	Sectoral Scope	TA Code		Technical Area within the scope		
	Energy industries (renewable - / non-renewable sources)	1.1		Thermal energy generation		
	Energy industries (renewable - / non-renewable sources)	1.2		Renewables		
	Energy distribution	2.1		Energy distribution		
	Energy demand	3.1		Energy demand		
	Waste handling and disposal	13.1		Solid waste and wastewater		
	Waste handling and disposal	13.2		Manure		
Authorized to work as Local Expert for:						
<i>Country/Countries</i>	India					
<u>Compliance check by:</u> Anand S. R.						

<u>Certificate of Competence</u>						
Name	☒ Mr. ☐ Ms.	Chetan Swaroop Sharma				
Qualification Procedure	Fulfil the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GHG Projects.					
Appointed to work as:						
	CDM Validator/Verifier	Team Leader	Team Member	Technical Expert	Technical Reviewer	Financial Expert
<i>Appointed</i>	Yes	Yes	Yes	Yes	Yes	No
<i>Appointed Date</i>	27-04-2021					
Authorized to work as Technical Expert for:						
<i>Authorized Technical Area</i>	Sectoral Scope	TA Code		Technical Area within the scope		
	Energy industries (renewable - / non-renewable sources)	1.1		Thermal energy generation		
	Energy industries (renewable - / non-renewable sources)	1.2		Renewables		
	Energy distribution	2.1		Energy distribution		
	Energy demand	3.1		Energy demand		
	Waste handling and disposal	13.1		Solid waste and wastewater		
	Waste handling and disposal	13.2		Manure		
Authorized to work as Local Expert for:						
<i>Country/Countries</i>	India					
<u>Compliance check by:</u> Anand S. R.						

<u>Certificate of Competence</u>						
Name	☒ Mr. ☐ Ms.	Rohit Badaya				
Qualification Procedure	Fulfils the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GHG Projects.					
Appointed to work as:						
	CDM Validator/Verifier	Team Leader	Team Member	Technical Expert	Technical Reviewer	Financial Expert
<i>Appointed</i>	Yes	Yes	Yes	Yes	Yes	No
<i>Appointed Date</i>	30-04-2022					
Authorized to work as Technical Expert for:						
<i>Authorized Technical Area</i>	Sectoral Scope		TA Code	Technical Area within the scope		
	Energy industries (renewable - / non-renewable sources)		1.1	Thermal energy generation		
	Energy industries (renewable - / non-renewable sources)		1.2	Renewables		
	Energy distribution		2.1	Energy distribution		
	Energy demand		3.1	Energy demand		
	Waste handling and disposal		13.1	Solid waste and wastewater		
	Waste handling and disposal		13.2	Manure		
Authorized to work as Local Expert for:						
<i>Country/Countries</i>	India					
<u>Compliance check by:</u> Anand S. R.						

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	Kosher Climate	Monitoring Report	Version 1.0, dated 16/05/2022	Kosher Climate
	Kosher Climate	Monitoring Report,	Version 2.0, dated 22/06/2022	Kosher Climate
	Kosher Climate	Monitoring Report,	Version 3.0, dated 21/12/2022	Kosher Climate
2	Kosher Climate	ER Calculation Sheet	Version 1.0, dated 16/05/2022	Kosher Climate
	Kosher Climate	ER Calculation Sheet	Version 2.0, dated 22/06/2022	Kosher Climate
	Kosher Climate	ER Calculation Sheet	Version 3.0, dated 21/12/2022	Kosher Climate
3	Kosher Climate	Approved GS PDD	Version 7.1, dated 18/04/2022	Publically available
4	4KES	Validation Report	Version 3.1, dated 18/04/2022	Publically available
5	GS	Design Review report	-	Publically available
6	UNFCCC	ACM0002: Grid connected electricity generation from renewable sources,	Version 20	Publically available
7	IPCC	1. 1996 IPCC Guidelines for National Greenhouse Gas Inventories: work book 2. 2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book	Web Link	Publically available
8	UNFCCC	Kyoto Protocol (1997)	Web Link	Publically available
9	UNFCCC	Gold Standard Monitoring report template & MR filling instruction	Version 1.1	Publically available
10	UNFCCC	CDM Project Standard for project activities	Version 03	Publically available
12	UNFCCC	CDM Validation and Verification Standard for project activities	Version 03	Publically available
13	UNFCCC	Glossary "CDM terms"	Version 10	Publically available
14	SECI	Commissioning certificates	-	Alfanar
15	SLDC	Monthly Energy meter statement	-	Alfanar
	Alfanar	Electricity sale invoices	-	Alfanar
16	Elster	Calibration Certificates	-	Alfanar
17	Alfanar	Bird Strike Register	-	Alfanar
18	Alfanar	Waste generation records	-	Alfanar
19	Alfanar	Hazardous waste disposal form (Form 10)	-	Alfanar
20	Alfanar	HSE Reports	-	Alfanar
21	Alfanar	Training Records	-	Alfanar
22	Alfanar	Employment Records	-	Alfanar
23	Alfanar & Servion & SGRE	O&M Contracts	-	Alfanar
24	TCEL	ESIA Report	-	Alfanar
25	Kosher Climate	Stakeholder Consultation Report including the supporting documents (invitations copy, minutes of meeting, attendance sheet & feedback forms)	Dated 21/12/2022	Alfanar
26	Kosher Climate	Email Sent to stakeholder feedback round	Dated 21/12/2022	Kosher
27	Supplier	Technical specification of WTG		Kosher
28	Alfanar	Complaint register		Kosher

Appendix 4. Clarification requests, corrective action requests and forward action requests

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

FAR ID	01	Section no.		Date:	02/06/2022
Description of CL					
In the validation report, the following FAR has been raised:					
The PP due to prevailing pandemic Covid-19 and constraints caused to Nation Wide lockdown has not been able to perform the Stakeholder Consultation, "Covid-19 Interim measures" (Version 4, Dt.,17.05.2021) relaxation has been allowed on conducting physical stakeholder consultation until the covid-19 situation eases. As per paragraph 2.1.1 'Alternative Measures' - The project developer may postpone physical stakeholder consultation meetings and the Stakeholder Feedback Round (SFR) for Gold Standard project/POA/VPAs until the COVID-19 situation eases. PP shall clarify how the above FAR is addressed.					
Project participant response					Date: 22/06/2022
Since the Risk of Covid situation has not been eliminated in the project region and there are government limitations to conduct group level physical meetings, Project owner has not been able to conduct the physical LSC meeting so far. However, the covid situation from the recent months has been in control and the limitations have been eased from the authorities. Hence the Project owner is planning to conduct the Physical LSC meeting in 2 nd week of July 2022.					
Documentation provided by project participant					
NA					
VVB assessment					Date: 27/06/2022
As the stakeholder meeting is yet to be conducted, a forward action request is raised for the next verification. Refer FAR-01.					
FAR is closed for this verification.					

Table 2. CL from this validation

CL ID	01	Section no.	E.1	Date:	02/06/2022
Description of CL					
In Section B.1, PP shall include the following details as per the template requirement:					
- Information on the implementation and actual operation of the project including relevant dates (e.g. construction, commissioning, start of operation) - Confirmation that if there have been any changes from the project design					
Project participant response					Date: 22/06/2022
Section B.1 of the MR has been updated with the details of the project implementation status and relevant dates in accordance with the guidelines.					
Documentation provided by project participant					
Revised MR					
VVB assessment					Date: 27/06/2022
PP now included the requested details as per the template requirement. CL is closed.					

CL ID	02	Section no.	E.7	Date:	02/06/2022
Description of CL					
As verified from energy meter calibration report and MR, it is found that the 1 st calibration is conducted on 17/12/2015 by the meter manufacturer which is valid till 16/12/2020. PP shall clarify whether any latest calibration done later to 17/12/2015. If no calibration is conducted, PP shall apply maximum possible error as per the CDM project standard requirements.					
Project participant response					Date: 22/06/2022

As per the PPA energy meters is completely in the control of SECI for ISTS projects and not under the control of Project Proponent. Though the meters were continuously calibrated as per the required frequency not all the calibration certificates for this monitoring are available with PP from the SECI. However, it is confirmed that all the meters during the monitoring period are in working condition without any faults or failures. In the absence of availability of calibration reports to be conservative Project proponent has applied the maximum error factor of 0.2% to the net electricity export values for the entire monitoring period.

Documentation provided by project participant	
Revised MR	
VVB assessment	Date: 27/06/2022
The explanation provided by PP is acceptable. Based on the discussion with PP and other PPs who have registered project with ISTS scheme, the assessment team confirms that the calibration certificates of energy are not made available to the PPs. However, PP has applied maximum possible error for the non-calibration validity period conservatively. This is found to be acceptable. CL is closed.	

CL ID	03	Section no.	E.9	Date: 02/06/2022
Description of CL				
The baseline and project SDG values mentioned in Section E.4 is not matching with Section B.1 and Section B.2. Please clarify				
Project participant response				Date: 22/06/2022
Same has been made consistent across the MR.				
Documentation provided by project participant				
Revised MR				
VVB assessment				Date: 27/06/2022
PP now corrected the baseline and project SDG values mentioned section E.4. CL is closed.				

CL ID	04	Section no.	E.9	Date: 22/06/2022
Description of CL				
PP shall clarify considerable reduction in number of employment activity compared to the estimated value in PDD.				
Project participant response				Date: 03/06/2022
In wind power projects most of the employees will be employed through the sub-contractor. This is the no of direct employment provided at the project site which has the records. In addition, few employees are also working at the corporate office working for this project and few employees are also working through some of the contractors for site cleaning other site works for which project owner does not have the details and records. Hence project owner has mentioned the 60 for which he has details. All together the total employment will be close to the estimated no i.e 100.				
Documentation provided by project participant				
NA				
VVB assessment				Date: 27/06/2022
The response provided by PP is found to be acceptable. PP has not considered the employment generated in corporate office and part time employees which is found to be conservative. CL is closed.				

Table 3. CAR from this validation

CAR ID	01	Section no.	E.1	Date: 02/06/2022
Description of CAR				
In 'Key Project Information' of the Monitoring report, the following observations found: - The version of applicable PDD is mentioned as version 7. However, as per the available records with us, the latest applicable PDD is 7.1. - Design Certification date is missing - Monitoring period number is missing - In table 1, the O&M cost reported is not consistent with ER sheet. - In table 2, PP provided details of all SDGs. However, as per the template requirement only the product details shall be mentioned in table 2. - In table 2, vintage wise breakup is not provided Corrective action is requested				
Project participant response				Date: 22/06/2022

All the corrections are made accordingly in the revised MR.	
Documentation provided by project participant	
<i>Revised MR</i>	
VVB assessment	Date: 27/06/2022
PP has made all the correction pointed out. CAR is closed.	

CAR ID	02	Section no.	E.5	Date: 02/06/2022
Description of CAR				
PP used version 17 of methodology ACM002 throughout the monitoring report which is not consistent with the approved PDD. Similarly, PP used version 6 of Tool to calculate the emission factor for an electricity system which is also not in consistent with the approved PDD. PP shall correct the same. `				
Project participant response				Date: 22/06/2022
Version numbers in the MR is corrected in consistent with the registered PDD.				
Documentation provided by project participant				
<i>Revised MR</i>				
VVB assessment				Date: DD/MM/YYYY
PP has corrected version number of methodology and tools as per registered PDD. CAR is closed.				

CAR ID	03	Section no.	E.2	Date: 02/06/2022
Description of CAR				
In section B.1.1 of the monitoring report, it is mentioned there no forward action request. However, it is noticed that there are some FARs raised in the validation report as well as the Design review report.				
PP shall address the FARs from validation in this section.				
Project participant response				Date: 22/06/2022
Section B.1 of the MR is updated with the FARs raised in the design review report.				
Documentation provided by project participant				
<i>Revised MR</i>				
VVB assessment				Date: 27/06/2022
PP has now included the FARs raised in valuation report and design review report in the MR. CAR is closed				

CAR ID	04	Section no.	-	Date: 02/06/2022
Description of CAR				
PP shall submit the following documents for our records:				
• Commissioning certificate • Latest calibration certificate • Bird Strike register				
Project participant response				Date: 22/06/2022
1. Commissioning certificates are provided 2. Due to the unavailability of calibration certificates calibration error has been applied for the generation of entire monitoring period. 3. Project owner maintains the format of Bird strike register at the project site. O&M people will report the incident on the day as the incident happened.				
Documentation provided by project participant				
1.commissioning certificates 2. Bird strike register.				
VVB assessment				Date: 27/06/2022
The requested documents are submitted now by PP. CAR is closed.				

Table 4. FAR from this validation

FAR ID	01	Section no.		Date: 27/06/2022
Description of FAR				



PP shall confirm how the comments from SFR is addressed in the next monitoring period and verifying VVB shall verify the same.

Also, the verifying VVB shall interview participant/invitee during next verification audit and provide their assessment considering the meeting and LSC requirements.

Project participant response	Date:DD/MM/YYYY
NA	
Documentation provided by project participant	
NA	
VVB assessment	Date: DD/MM/YYYY

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