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Gold Standard for Global Goals Verification Report

GOLD STANDARD VERIFICATION
GS PROJECT NO. (GS-6290)

200 MW Wind Power Project in Tamil Nadu by Orange Sironj

Report No. 10805ME

19 March 2021

TÜV SÜD South Asia Pvt. Ltd.
Solitaire, I.T.I. Road, Aundh
Pune- 411007
INDIA

Title of the project activity	200 MW Wind Power Project in Tamil Nadu by Orange Sironj									
GS Reference number of the project activity	GS 6290									
Version number of the verification and certification report	4.0									
Completion date of the verification and certification report	05/05/2021									
Monitoring period number and duration of this monitoring period	2 (1st Crediting Period) 01/10/2019 to 31/12/2020									
Version number of monitoring report to which this report applies	03									
Crediting period of the project activity corresponding to this monitoring period	07/03/2019-06/03/2024									
Project participant(s)	Orange Sironj Wind Power Pvt Ltd.									
Host Party	India									
Sectoral scope(s)	1									
Methodology (ies)	ACM0002 “Grid-connected electricity generation from renewable sources” Version 18.1									
Estimated amount of annual average certified SDG impact (as per approved PDD)	770,248 tCO _{2e}									
Certified GHG emission reductions or net anthropogenic GHG removals for this monitoring period	650,601 tCO _{2e} <table><tr><td>Year</td><td>Emission Re- ductions (tCO₂)</td></tr><tr><td>2019</td><td>95,576</td></tr><tr><td>2020</td><td>555,025</td></tr><tr><td>Total</td><td>650,601</td></tr></table>		Year	Emission Re- ductions (tCO ₂)	2019	95,576	2020	555,025	Total	650,601
Year	Emission Re- ductions (tCO ₂)									
2019	95,576									
2020	555,025									
Total	650,601									
Name of DOE	TUV SUD South Asia Pvt Ltd (E-0005)									
Name, position and signature of the approver of the verification and certification report	 Milind Shende, Manager Certification Body, TUV SUD South Asia Pvt Ltd									

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1 METHODOLOGY

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 comply with the requirements of Gold Standard requirements. According to this assessment TÜV SÜD shall:

- ensure that the project activity has been implemented and operated as per the registered PDD, and that all physical features (technology, project equipment, monitoring and metering equipment) of the project are in place,
- ensure that the published MR and other supporting documents provided are complete, verifiable and in accordance with applicable GS4GG and CDM requirements,
- ensure that the actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology,
- evaluate the data recorded and stored as per the applicable requirements.
- assessment of the sustainability monitoring parameters as per the GS requirements.

1.2 Scope

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

- GS 4 GG requirements
- Clean Development Mechanism Validation And Verification Standard (VVS) for Project Activities v2.0
- Baselines and monitoring methodologies (including GHG inventories)
- Environmental issues relevant to the applicable sectoral scope
- Applicable environmental and social impacts and aspects of GS project activity
- 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 project design.

Once TÜV SÜD receives the MR, it is made available on the GS Registry through a dedicated interface on the Gold standard website. The Verification shall commence only after the project documents are listed on the registry.

1.3 Verification Process

The information provided by the project participants is assessed by applying the means of verification specified in the GS4GG, Toolkit and the VVS.

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 GS 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 remote site visit, 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 CB "Environment and energy" before submission to the GS.

1.4 Appointment of the Team

According to the technical scopes and experiences in the sectoral or national business environment, TÜV SÜD has composed an assessment team in accordance with the appointment rules of the TÜV SÜD Certification Body "Environment and Energy".

The composition of an assessment team has to be approved by the Certification Body (CB) to assure that the required skills are covered by the team. The CB of TÜV SÜD operates the following qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL);
- Verifier (V);
- Verifier Trainee (T);
- Technical Experts (TE);
- Country expert (CE);
- Technical reviewer (TR).

It is required that the sectoral scope(s) and the technical area(s) (TA) linked to the methodology/ies and project has to be covered by the assessment team. Appointment certificates of the selected team members are attached to this report as Annex.

Verification team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk review	On-site inspection	Interview(s)	Verification findings
1.	Team Leader	IR	Murty	Eswar	TUV SUD South Asia	☐		☒	☒
2	Verifier & Technical Expert	EI	Kewat	Shailendra	TUV SUD South Asia	☒		☒	☒

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 DOE or outsourced entity)
1.	Technical reviewer	EI	Meesa	Srikanth	TUV SUD South Asia
2.	Approver	IR	Shende	Milind	TUV SUD South Asia

1.5 Review of Documents

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

- verify the completeness of the data and the information presented in the MR.
- check the compliance of the MR with respect to the monitoring plan depicted in the registered PDD and verify that the applied methodology was carried out. Particular attention to the frequency of measurements, the quality of the metering equipment including calibration requirements, and the quality assurance and quality control procedures was paid,
- evaluate the data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

A complete list of all documents reviewed is available in the Information Reference List attached as Annex 2 to this report.

1.6 On-site Assessment and follow-up Interviews

The DOE has not conducted the on-site inspection for this current monitoring period, which is the second periodic verification of this project activity, due to the Covid-19 pandemic and the ongoing travel restrictions outside the country. The PP has a commitment to deliver CERs before May 2021, which has been confirmed by the DOE based on the submitted Emission Reduction purchase Agreement (ERPA) and hence the DOE could not postpone the onsite visit.

The DOE has used alternative measures of verification in place of mandatory on-site inspections. This has been done as per the decision taken by Gold Standard Covid-19 measures and CDM-EB alternative measures until 30th June 2021 as per p.28 EB 108. The DOE has used standard auditing techniques as per section 7.1.3 of CDM VVS PA v2.0 to conduct the remote assessment of the PA with the help of web meetings and video conferencing. The interviews and discussions were conducted successfully with the PP and their representatives.

The DOE has conducted web meetings and video conference with PP and their representatives on 2nd February 2021 in line with 4.2.2 of Covid-19 measures by Gold Standard. The interviews and discussions were conducted successfully, and it is sufficient for the DOE to verify and prepare the report.

Duration of Remote Audit & Interviews: 30/12/2020				
No.	Activity performed	Site location	Date	Team member
1.	During the remote assessment of the project TÜV SÜD team has assessed the implementation and operation of the project activity, reviewed the information flows for generating, aggregating and reporting the monitoring parameters, interviewed key personnel of the project and also few households for sampling to confirm the operational status of the stoves.	Remote	02/02/2021	Shailendra Kewat Eswar Murty

Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Krishnam	Murali	Manager	02/02/2021	Monitoring and project implementation and SDG parameters	Shailendra Kewat Eswar Murty
2	M	Balasubramanian	Site-Incharge	02/02/2021	Monitoring and project implementation and SDG parameters	Shailendra Kewat Eswar Murty
3	Barve	Samarth	Consultant	02/02/2021	Monitoring, sampling, project implementation and ER calculations	Shailendra Kewat Eswar Murty

1.7 Resolution of Clarification and Corrective and Forward Action Requests

The objective of this phase of the verification is to resolve the requests for corrective actions, clarifications, and any other outstanding issues which need to be clarified for TÜV SÜD's conclusion on the achieved emission reductions. Three CARs, one CR and no FARs were raised during the course of verification. All the CARs and CRs raised by TÜV SÜD are resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the verification process, the concerns raised and responses that have been given are documented in detail in the List of Findings that is attached as Annex 1 to this report.

1.8 Internal Quality Control

Internal quality control within the team is assured by means of a technical review process that takes place after the remote assessment and after closure of findings. The internal quality control in the verification process is given by the final decision (Verification and Certification Conclusion) made by the CB "Environment and Energy".

2 CARBON VERIFICATION AND REPORTING

In the following sections, the results of the verification are stated. The verification results relate to the project performance as documented and described in the final PDD and final Monitoring Report. The verification findings for each verification subject are presented below.

2.1 FARs from Validation / Previous Verification

No FARs envisaged from previous verification and or Validation. This is 2nd periodic verification for the project activity.

2.2 Project Implementation in accordance with the registered PDD

The project activity involves installation of a 200 MW wind power project, promoted by Orange Sironj Wind Power Pvt Ltd. (OSWPPL). The purpose of the project activity is to generate clean electricity with utilization of wind energy. The project activity aims to harness Wind energy through installation of 100 nos. of 2 MW WTGs of Gamesa make (model - G114/2000kW IEC Class S model year version with 106m height of tower) with total installed capacity of 200 MW.

The electricity generated by the project is exported to the Power Grid Corporation of India Limited (PGCIL). The project activity is therefore displacing an equivalent amount of electricity which would have otherwise been generated by fossil fuel dominant electricity grid and there by reduces the associated CO2 emissions.

The start date of the project activity is 22nd November 2017, which is the signing date of the EPC contract for project activity. The first 50 WTGs were installed on 05th March 2019 and remaining 50 WTGs were installed on 13th March 2019. Same has been confirmed by the commissioning certificate issued by Solar Energy Corporation of India Ltd. (SECI).

The total number of WTGs installed are given below:

S. No.	WTGs	Easting	Northing
1	GPV-003	77° 59' 52.64"E	8°49'48.53"N
2	GPV-004	77° 55' 28.86" E	8°47'28.29"N
3	GPV-005	77° 57' 53.86"E	8°47'52.95"N
4	GPV-007	77° 55' 41.95"E	8°48'37.92"N
5	GPV-009	77° 57'26.15"E	8°49'16.13"N
6	GPV-010	77° 58'35.36"E	8°51'36.10"N
7	GPV-011	77° 55'37.35"E	8°46'45.70"N
8	GPV-012	77° 55'46.12"E	8°49'50.67"N
9	GPV-013	77° 55'8.16"E	8°49'15.14"N
10	GPV-016	77° 56'51.85"E	8°49'35.66"N
11	GPV-017	77° 57'20.34"E	8°48'58.14"N
12	GPV-019	77° 56'41.27"E	8°48'18.77"N
13	GPV-020	77° 55'28.90"E	8°47'3.03"N
14	GPV-029	77° 55'27.56"E	8°45'39.22"N
15	GPV-085	77° 58'31.60"E	8°48'32.05"N

16	GPV-094	77° 55'9.04"E	8°46'33.73"N
17	GPV-095	77° 57'58.20"E	8°49'5.99"N
18	GPV-165	77° 52'58.34"E	8°46'40.20"N
19	GPV-175	77° 58'38.43"E	8°52'4.94"N
20	GPV-228	77° 53'54.07"E	8°46'4.63"N
21	GPV-030	77° 59'6.81"E	8°47'59.52"N
22	GPV-297	77° 56'9.84"E	8°45'45.68"N
23	GPV-390	77° 59'32.11"E	8°47'23.59"N
24	GPV-469	77° 57'51.91"E	8°46'19.47"N
25	GPV-472	77° 53'58.35"E	8°46'31.75"N
26	GPV-525	77° 57'12.51"E	8°52'7.95"N
27	GPV-527	77° 54'51.48"E	8°45'19.25"N
28	GPV-529	77° 57'17.46"E	8°47'19.32"N
29	GPV-530	77° 59'34.72"E	8°51'57.79"N
30	GPV-539	77° 55'46.90"E	8°48'55.75"N
31	GPV-545	77° 59'16.80"E	8°52'54.88"N
32	GPV-555	77° 59'23.49"E	8°57'39.57"N
33	GPV- 560	77° 58' 49.17" E	8°54'54.42"N
34	GPV- 676	77° 55'57.01" E	8°49'26.56"N
35	GPV- 690	77° 56'19.68" E	8°47'25.52"N
36	GPV- 696	77° 54'27.77" E	8°47'23.14"N
37	GPV- 730	77° 59'30.80" E	8°48'28.33"N
38	GPV- 731	77° 59'28.56" E	8°48'46.72"N
39	GPV- 002	78° 2' 56.28" E	8°54'28.21"N
40	GPV- 006	78° 2' 19.57" E	8°53'25.71"N
41	GPV- 018	78° 2' 18.87" E	8°51'33.34"N
42	GPV- 023	78° 1' 12.19" E	8°51'6.34"N
43	GPV- 026	78° 2' 43.18" E	8°53'9.73"N
44	GPV- 027	78° 2' 54.87" E	8°50'19.87"N
45	GPV- 130	78° 0' 34.54" E	8°51'27.92"N
46	GPV- 151	78° 4' 52.55" E	8°54'23.70"N
47	GPV- 227	78° 1' 41.52" E	8°51'26.51"N
48	GPV- 021	78° 0' 14.33" E	8°58'24.99"N
49	GPV- 022	78° 3' 3.69" E	8°55'39.59"N
50	GPV- 028	78° 3' 16.68" E	8°56'39.79"N
51	GPV- 256	78° 3' 0.34" E	8°59'7.96"N
52	GPV- 269	78° 3' 48.50" E	8°58'38.32"N
53	GPV- 290	78° 2' 59.08" E	8°51'22.11"N
54	GPV- 310	78° 3' 34.77" E	8°56'19.15"N
55	GPV- 318	78° 0' 17.32" E	8°48'56.47"N
56	GPV- 321	78° 2' 40.53" E	8°50'38.44"N

57	GPV- 335	78° 3' 31.73" E	8°54'37.30"N
58	GPV- 373	78° 3' 50.77" E	8°58'15.90"N
59	GPV- 526	78° 2' 30.73" E	8°50'37.43"N
60	GPV- 528	78° 2' 46.27" E	8°53'44.03"N
61	GPV- 531	78° 3' 6.85" E	8°58'43.55"N
62	GPV- 547	78° 3' 26.27" E	8°57'19.84"N
63	GPV- 487	78° 3' 11.25" E	8°58'9.67" N
64	GPV- 523	78° 2' 21.60" E	8°52'41.20"N
65	GPV- 565	78° 2' 52.69" E	8°59'39.96"N
66	GPV- 641	78° 2' 12.49" E	8°59'19.31"N
67	GPV- 642	78° 4' 15.74" E	8°55'43.28"N
68	GPV- 691	78° 2' 13.56" E	8°59'44.43"N
69	GPV- 698	78° 2' 28.26" E	8°50'11.20"N
70	GPV- 699	78° 2' 57.52" E	8°54'5.00"N
71	GPV- 355	78° 6' 57.09" E	8°58'19.68"N
72	GPV-398	78° 4' 28.01" E	9°0'4.53"N
73	GPV- 542	78° 4' 21.08" E	8°59'18.45"N
74	GPV- 074	78° 5' 7.17" E	8°59'51.80"N
75	GPV- 077	78° 5' 6.28" E	8°59'31.82"N
76	GPV- 078	78° 5' 7.60" E	8°58'45.72"N
77	GPV- 070	78° 5' 10.44" E	8°58'25.54"N
78	GPV- 234	78° 5' 42.94" E	8°56'40.59"N
79	GPV- 307	78° 6' 7.82" E	8°56'54.64"N
80	GPV- 050	78° 6' 14.28" E	8°57'32.97"N
81	GPV- 235	78° 6' 21.76" E	8°57'59.14"N
82	GPV- 032	78° 6' 23.73" E	8°59'17.31"N
83	GPV- 033	78° 6' 40.65" E	8°58'55.39"N
84	GPV- 543	78° 6' 34.98" E	8°56'11.07"N
85	GPV- 720	78° 1' 52.37" E	8°50'42.14"N
86	GPV- 724	78° 2' 12.75" E	8°52'59.70"N
87	GPV- 725	78° 4' 12.32" E	8°55'0.94"N
88	GPV- 726	78° 4' 6.75" E	8°56'3.89"N
89	GPV- 727	78°4' 20.29" E	8°59'40.27"N
90	GPV- 058	78° 7' 47.73" E	8°59'1.25"N
91	GPV- 061	78° 7' 46.52" E	8° 59'29.96"N
92	GPV- 100	78° 8' 15.02" E	8°58' 39.08"N
93	GPV- 161	78° 7' 48.95" E	8°56'26.36"N
94	GPV- 367	78° 7' 48.95" E	8°58'26.20"N
95	GPV-068	78° 6' 17.75" E	9°0'1.26"N
96	GPV- 125	78° 9' 19.85" E	8°57'11.12"N
97	GPV- 349	78° 9' 14.75" E	8°58'6.34"N

98	GPV- 541	78° 9' 43.10" E	8°57'33.94" N
99	GPV- 728	78° 8' 0.92" E	8°57'40.43" N
100	GPV- 729	78° 7' 43.08" E	8°55'53.55" N

2.3 Sampling Approach

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

2.4 CLs, CARs and 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			
Compliance of the project implementation with the registered PDD			
Post-registration changes			
Compliance of the monitoring plan with the monitoring methodology including applicable tool and standardized baseline	2		
Compliance of monitoring activities with the registered monitoring plan			
Compliance with the calibration frequency requirements for measuring instruments			
Assessment of data and calculation of emission reductions or net removals		2	
Others (Assessment of SDG outcomes)		1	
Total	2	3	0

2.5 Compliance of the Monitoring Plan with the Methodology

During the document review and furthermore during the remote audit, the verification team has reviewed the registered monitoring plan and compared it with the monitoring methodology to verify their compliance. The verification team confirmed that the implemented monitoring plan is in compliance with the registered PDD and the monitoring methodology as well.

2.6 Compliance of the Monitoring with the Monitoring Plan

The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD. All parameters were monitored and determined as per the Monitoring Plan.

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

The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD. All parameters were monitored and determined as per the Monitoring Plan.

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

Data / Parameter:	EG PJ, y
Data unit:	MWh
Description:	Quantity of net electricity supplied to the grid during the year y.

Source of data used:	Calculated (based on the measured values of electricity exported and imported)					
Means of verification/Comments:	The Net electricity supplied to the grid by the project activity is calculated as a difference of electricity exported to the grid, electricity imported from the grid obtained from Monthly Meter reading reports provided by SECI as per below equation: $EG_{PJ,y} = EG_{Export} - EG_{Import}$ Quantity of net electricity supplied to the grid is cross checked from the Invoices/ Monthly Bill raised by the Project Participant to SECI.					
	Meter Details:					
	Equipment	Serial No.	Location	Accuracy class	Calibration date	Valid till
	Main Meter	SA0011A	PGCIL Sub-station	0.2s	05/02/2016	04/02/2021
	Check Meter	SA0012A	PGCIL Sub-station	0.2s	05/02/2016	04/02/2021
Stand by Meter	SA0015A	Project Site Switchyard	0.2s	05/02/2016	04/02/2021	
Cross-check	Value has been cross verified with the invoice generated					

Data / Parameter:	Air quality
Data unit:	tCO ₂
Description:	Reduction in CO ₂ emission reduction due to implementation of project activity
Source of data used:	Calculated as per registered PDD
Means of verification/Comments:	Emission reduction calculated in line with applied methodology and PDD V04. ER calculation checked in ER spread sheet and found to be correct and conservative.
Cross-check	Baseline and emission calculation sheets were compared with actual monitoring data.

Data / Parameter:	Quality of employment
Data unit:	Number of Trainings provided to employees & O&M staffs
Description:	Trainings provided to employees & O&M staff
Source of data used:	Measured

Means of verification/Comments:	PP has confirmed that total 15 trainings have been provided to their employees during current monitoring period. Training details are as follows:			
	S. No.	Name of Training	Number of participants	Date of Training
	2019			
	1	Permit to work & control of work	10	01/10/2019
	2	Electrical Safety	12	02/10/2019
	3	Road Safety, Safety Alert Review	11	03/10/2019
	2020			
	1	Responsibility & Accountability	11	15/06/2020
	2	Work at height	13	22/06/2020
	3	Training on defensive driving	02	15/10/2020
	4	Electrical safety services	13	14/10/2020
	5	Environmental awareness	06	11/08/2020
	6	Road safety campaign	13	25/07/2020
	6	Ergonomics	11	03/08/2020
	7	Fire fighting & Electrical safety	14	14/10/2020
	8	Incident & Accident reporting	13	14/10/2020
	9	Safety Awareness	15	28/09/2020
	10	Cut Prevention	09	04/07/2020
	11	HSE Awareness E - learning	07	10/07/2020
	12	Work Resumption after lock-down	06	21/05/2020
Cross-check	DOE has verified the training records submitted by PP			

Data / Parameter:	Quantitative employment and income generation
Data unit:	1.INR (Salary) 2.Number of employees involved in the project
Description:	Salary given to the employees of the project. Number of people employed directly due to the project activity with number of male/female, permanent/temporary, age and person with disabilities.
Source of data used:	Plant employment records Salary Slip of the project employees.
Means of verification/Comments:	The number of persons employed has been verified with the daily log book records. Salary paid to employees has been verified through salary slips submitted by PP.
Cross-check	--

3 SUSTAINABILITY VERIFICATION

The monitoring has been carried out in accordance with the GS sustainability monitoring plan contained in the registered PDD and annex. All the sustainability parameters were monitored and determined as per the Monitoring Plan.

3.1 Assessment of SDG outcomes for the current Monitoring period

SDG Indicator	SDG 7: Affordable and clean energy
Data Unit :	MWh/ year
Description :	Quantity of net electricity supplied to the grid during the year y.
Source of data used :	Calculated (based on the measured values of electricity exported and imported)
Means of verification /comments :	Quantity of electricity supplied during current monitoring period is 674059. Same has been verified with the JMR submitted by PP. Amount estimated in registered PDD: 635976 MWh/Annually

SDG Indicator	SDG 13: Climate Action								
Data Unit :	Fraction								
Description :	Improvement in air quality after project intervention								
Source of data used :	CEA database								
Means of verification /comments :	Estimated ER in the PDD was: 613,844 tCO₂/Annually ER achieved during current monitoring period is: <table border="1"> <thead> <tr> <th>Year</th><th>Emission reduction achieved in tCO₂</th></tr> </thead> <tbody> <tr> <td>2019</td><td>95,576</td></tr> <tr> <td>2020</td><td>555,025</td></tr> <tr> <td>Total</td><td>650,601</td></tr> </tbody> </table> The above data has been checked from the JMR.	Year	Emission reduction achieved in tCO ₂	2019	95,576	2020	555,025	Total	650,601
Year	Emission reduction achieved in tCO ₂								
2019	95,576								
2020	555,025								
Total	650,601								

SDG Indicator	SDG 8: Decent work and economic growth
Data Unit :	Number
Description :	Number of trainings
Source of data used :	HSE log book record
Means of verification /comments :	Total 15 training has been given to the employees during current monitoring period. DOE has verified the training records for the same.

The adequacy and compliance of the monitoring plan in the Monitoring report was found as per the requirements laid by the approved GS4GG PDD. The information flow (from data generation, aggregation, to recording, calculation and reporting) is already included under respective parameter above. The verification team has verified all the data and collected evidence as per the required monitoring frequency and found to be correct and appropriate meeting the requirements of the applied methodology and registered PDD. As a part of continuous feedback from stakeholders, the grievances register is being placed at site and is being continuously monitored and addressed through the grievances cell on regular basis and maintained in a register at Green Infra Wind Energy Private Limited site office.

3.2 Assessment of Data and Calculation of Greenhouse Gas Emission Reductions

Means of verification	Baseline Emissions for the amount of electricity supplied by project activity, BE_y is calculated as: Project emissions: Project Emissions, PE_y = 0 Emission reductions: Calculation of baseline emission is as follows; $BE_y = EGPJ_y \times EF_{grid,CM,y}$ Where, EGPJ, y = 674,059 MWh EF_{grid,CM,y}, y = 0.9652 tCO₂e/MWh Hence, BE_y = 674,059 MWh * 0.9652 tCO₂e/MWh = 650,601 tCO₂e
Findings	N/A
Conclusion	As a result of verification of the ER calculation process, the assessment team confirmed that all the parameters required for the determination of the emission reductions have been included in the Monitoring report Version 01 & Monitoring report Version 02 and corresponding ER calculation spreadsheets and are consistent with the applied methodology ACM0002 version 18.1 and the monitoring plan contained in the registered PDD. The parameters are complete in this monitoring period.

4 VERIFICATION OPINION

TUV SUD South Asia has performed first verification of the emission reductions reported for the project activity “ 200 MW Wind Power Project in Tamil Nadu by Orange Sironj ”, GS Reference No. 6290 for the period 01/10/2019 to 31/12/2020, with regard to the relevant GS4GG principles and requirements. The project participants are responsible for the collection of data in accordance with the monitoring plan and the reporting emission reductions from the project.

It is TUV SUD’s responsibility to express an independent verification opinion on the reported emission reductions from the project and does not express any opinion on the selected baseline scenario or on the validated and registered PDD. Based on documented evidences and corroborated by remote assessment TUV SUD can confirm that:

- (i) the project has been implemented and operated as per the PDD;
- (ii) the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable GS4 GG principles and requirements;
- (iii) the monitoring is in place as per the applied baseline and monitoring methodology; (iv) the monitoring complies with the monitoring plan;
- (iv) the monitoring plan in the PDD is as per the applied baseline and monitoring methodology.

Annex 1:List of Findings

Table 1. CL from this verification

CL ID	01	Section no.		Date: 16/02/2021
Description of CL				
Since some documents has named Greenko, PP has to clarify what is the role of Greenko in the project?				
Project participant response				Date: 27/02/2021
Greenko Group is the holding company of the project activity and the PP i.e, Orange Sironj Wind Power Pvt Ltd. Is the SPV of Greenko Group. The Invoices of the sale of electricity to Solar Energy Corporation of India Limited and the Power purchase Agreement of the project can be checked to confirm the same.				
Documentation provided by project participant				
Invoice PPA				
DOE assessment				Date: 10/03/2021
Soporting documents have been verified and found Orange Sironj Wind Power Pvt. Ltd. Is the SPV of the Greenko group. Hence CL is closed				

CL ID	02	Section no.		Date: 16/02/2021
Description of CL				
PP has to provide the documents for LTA permission from PGCIL.				
Project participant response				Date: 27/02/2021
The Long Term Access Agreement (hereinafter called LTAA) Permission from Power Grid Corporation of India Limited is hereby submitted to the assessment team.				
Documentation provided by project participant				
LTAA from PGCIL				
DOE assessment				Date: 10/03/2021
LTAA has been submitted. Hence CL is closed				

Table 2. CAR from this verification

CAR ID	01	Section no.	D.1	Date: 16/02/2021
Description of CAR				
Year mentioned for the CEA database is incorrect				
Project participant response				Date: 27/02/2021

The section D.1 is revised now and the revised PDD is hereby submitted to the assessment team.	
Documentation provided by project participant	
Revised PDD	
DOE assessment	Date: 10/03/2021
Revised PDD received. CAR is closed	

CAR ID	02	Section no.	D.1	Date: 16/02/2021
Description of CAR				
Emission reduction value is not consistent in MR.				
Project participant response				Date: 27/02/2021
The Emission Reductions Value throughout the MR is corrected and is consistent now with the ER Sheet. The revised MR & ER Sheet is hereby submitted to the DOE.				
Documentation provided by project participant				
Revised MR ER Sheet				
DOE assessment				Date: 10/03/2021
Now value of ER is consistent. CAR is closed				

CAR ID	03	Section no.	VER sheet	Date: 16/02/2021
Description of CAR				
The PP shall update the ER sheet to indicate the relevant SDG outcome associated with the ER sheet				
Project participant response				Date: 27/02/2021
The ER sheet is amended with all the SDG outcome i.e. SDG 7, SDG 8 & SDG 13 in different tab titled SDG Outcomes.				
Documentation provided by project participant				
Revised ER Sheet				
DOE assessment				Date: 09/03/2021
The ER sheet is not consistent with the MR				
Project participant response				Date: 11/03/2021
The Monitoring Report is revised now and is consistent with the ER sheet.				
DOE assessment				Date: 12/03/2021
Revised MR and ER sheet received and now consistent. CAR is closed				

Table 3. FAR from this verification
NA.

Annex 2

Information Reference List

REF. NO.	Author/Editor/ Issuer	Title/Type of Document. Publication place	Issuance and/or sub- mission date (dd/mm/yyyy)	Additional Infor- mation (Rele- vance in CDM Context)
1.	OSWPPL	GS 6290 Revised PDD version 4	07/08/2019	
2.	OSWPPL	GS 6290Transition Annex to PDD version 01		
3.	OSWPPL	GS 6290 Monitoring Report version 01	23/01/2021	
4.	OSWPPL	GS 6290 Monitoring Report version 02	10/03/2021	
5.	OSWPPL	GS 6290 Monitoring Report version 03	05/05/2021	
6.	Gold Standard	GS 6290 project page		
7.	OSWPPL	GS 6290 ER calculation sheet version 01	12/12/2020	
8.	OSWPPL	GS 6290 ER calculation sheet version 02	07/01/2021	
9.	OSWPPL	Field data sheets for ER and SDG monitoring	2019-2020	
10.	OSWPPL	Employees log book record	2019-2020	
11.	OSWPPL	Sample salary slips of employees	2019-2020	
12.	OSWPPL	List of Employees	2019-2020	
13.	OSWPPL	Training records	2019-2020	



South Asia

Annex 3

Appointment Certificates



CERTIFICATE OF APPOINTMENT

Mr. Murty, Eswar fulfils the requirements of the Certification Body 'Environment and Energy' of TUV SUD South Asia Pvt Ltd to participate in audits.

Qualification applicable to					
Standard	CDM	GS	VCS	ISO-14004-1:2006	Other
	☒	☒	☒	☒	☐

Qualification as						
Status	Validator	Verifier	ATL	Technical Reviewer	Financial Expert	Technical Expert
	☒	☒	☒	☒	☒	☒
TA (s)	1.1, 1.2, 3.1, 4.1, 13.1					

Country Expertise						
Region	1	2	3	4	5	Other
	☒	☐	☐	☐	☐	
Further countries						

Technical Area	
1.1_Thermal Energy Generation	
1.2_Renewables	
3.1_Energy demand	
4.1_Cement and lime production	
13.1_Solid waste and wastewater	

This appointment is valid until 31.05.2021 and is bound by internal requirements of the Certification Body 'Environment and Energy' of TUV SUD South Asia Pvt Ltd.

In case of loss of validity of this certificate as per result of an assessment according to internal procedures or due to any other reason, it will be properly communicated to you.

Your Certificate has the internal reference no. CB-IND-CCP-0031/011.

Date	Signature
01/08/2020	

IS-CMS-CB-POG-01/05, version 03

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CERTIFICATE OF APPOINTMENT

Mr. Kewat, Shailendra fulfills the requirements of the Certification Body 'Environment and Energy' of TUV SUD South Asia Pvt Ltd to participate in audits.

Qualification applicable to					
Standard	CDM	GS	VCS	ISO-14004-1: 2008	Other
	☒	☒	☒	☒	☐

Qualification as						
Status	Validator	Verifier	ATL	Technical Reviewer	Financial Expert	Technical Expert
	☒	☒	☒	☐	☒	☒
TA (s)	1.2, 3.1, 5.1, 13.1					

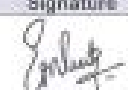
Country Expertise						
Region	1	2	3	4	5	Other
	☒	☐	☐	☐	☐	
Further countries						

Technical Area
1.2_Renewables
3.1_Energy Demand
5.1_Chemical Industries
13.1_Solid waste and waste water

This appointment is valid until 31.05.2021 and is bound by internal requirements of the Certification Body 'Environment and Energy' of TUV SUD South Asia Pvt Ltd.

In case of loss of validity of this certificate as per result of an assessment according to internal procedures or due to any other reason, it will be properly communicated to you.

Your Certificate has the internal reference no. CB-IND-CCP-0105/001.

Date	Signature
01/09/2020	

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CERTIFICATE OF APPOINTMENT

Mr. Meesa, Srikanth fulfils the requirements of the Certification Body 'Environment and Energy' of TÜV SÜD South Asia Pvt Ltd to participate in audits.

Qualification applicable to					
Standard	CDM	GS	VCS	ISO-14064-1: 2006	Other
	☒	☒	☒	☒	☐

Qualification as						
Status	Validator	Verifier	ATL	Technical Reviewer	Financial Expert	Technical Expert
	☒	☒	☐	☒	☐	☒
TA (s)	1.2, 3.1, 7.1, 13.1					

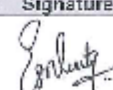
Country Expertise						
Region	1	2	3	4	5	Other
	☒	☐	☐	☐	☐	
Further countries						

Technical Area	
1.2_Renewables	
3.1_Energy demand	
7.1_Transport	
13.1_Solid waste and wastewater	

This appointment is valid until 31.05.2021 and is bound by internal requirements of the Certification Body 'Environment and Energy' of TÜV SÜD South Asia Pvt Ltd.

In case of loss of validity of this certificate as per result of an assessment according to internal procedures or due to any other reason, it will be properly communicated to you.

Your Certificate has the internal reference no. CB-IND-CCP-0096/007.

Date	Signature
01/06/2020	

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