Gold Standard for Global Goals Verification Report

GOLD STANDARD VERIFICATION OF
GS PROJECT NO. (GS-7137)

50 MW Mahoba Solar PV Power Project by M/s Prayatna Developers Pvt. Ltd. at Mahoba, UP

Report No. 10852SK

08 July 2022

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

Title of the project activity	50 MW Mahoba Solar PV Power Project by M/s Prayatna Developers Pvt. Ltd. at Mahoba, UP
GS Reference number of the project activity	GS 7137
Version number of the verification and certification report	07
Completion date of the verification and certification report	08/07/2022
Monitoring period number and duration of this monitoring period	16/11/2018 to 31/12/2020 (both days included)
Version number of monitoring report to which this report applies	06
Crediting period of the project activity corresponding to this monitoring period	16/11/2018 to 15/11/2023
Project participant(s)	Prayatna Developers Pvt. Ltd.
Host Party	India
Sectoral scope(s)	1
Methodology (ies)	ACM0002 "Grid-connected electricity generation from renewable sources" Version 20.0
Estimated amount of annual average certified SDG impact (as per approved PDD)	94,209 $tCO2_e$
Certified GHG emission reductions or net anthropogenic GHG removals for this monitoring period	207,545 $tCO2_e$

Year	Emission Reductions (tCO_2)
2018	12,082
2019	97,004

<table>
<tr><td></td><td><table><tr><td></td><td></td></tr><tr><td>2020</td><td>98,459</td></tr><tr><td>Total</td><td>207,545</td></tr></table></td></tr>
<tr><td>Name of DOE</td><td>TUV SUD South Asia Pvt Ltd (E-0005)</td></tr>
<tr><td>Name, position and signature of the approver of the verification and certification report</td><td>Eswar Murty, Sr. Manager
Certification Body, TUV SUD South Asia Pvt Ltd</td></tr>
</table>

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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 v3.0
- 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 on-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, 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	IR	Murty	Eswar	TUV SUD South Asia
2.	Approver	IR	Murty	Eswar	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

A site inspection was carried out to check the project design and confirm that the project is implemented and operated as described in the PD. The project site visit was inspected on *10/08/2021* and discussion on implementation and operation of the project and operation was conducted by studying related documents at project site. Also, relevant monitoring procedures were checked, environmental impacts of the project activity was conducted as well.

To physically verify the compliance of project installation with the methodology, relevant tools and the GS standard requirements, the verification team at project site, accompanied by representatives of PP.

In addition to physical checks, the verification team interviewed the PP and it was confirmed that the project is greenfield renewable energy project. Thus, the baseline scenario is in compliance with the requirements of the methodology.

Duration of Site Audit & Interviews				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	During the site assessment of the project TUV SUD 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.	Uttar Pradesh	10/08/2021	Shailendra Kewat

Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1	Tiwari	Pradip Kumar	Site-Incharge	10/08/2021	Monitoring and project implementation and SDG parameters	Shailendra Kewat
2	-	Rajeev	Engineer	10/08/2021	Monitoring and project implementation and SDG parameters	Shailendra Kewat
3	-	Nitin	Engineer	10/08/2021	Monitoring and project implementation and SDG parameters	Shailendra Kewat
4	Gurlhosur	Shraddha	Consultant	10/08/2021	Monitoring, sampling,project implementation and ER calculations	Shailendra Kewat

Apart from them the following stakeholders were interviewed :

Interviewed Personnel	Functions	Organization	Subject
Ashish	Local stakeholder	Villager	General aspects of the project, Quality management system, Environmental and social issues, Projects contribution to sustainable development, greviance mechanism
Prashant	Local stakeholder	Villager	
Rani	Local stakeholder	Villager	
Laxmi	Local stakeholder	Villager	
Shivam	Local stakeholder	Villager	
Prasad	Local stakeholder	Villager	
Deepak	Local stakeholder	Villager	
Chandu	Local stakeholder	Villager	
Vicky	Local stakeholder	Villager	

Few of the responses received from local stakeholders are mentioned below:

1. Name of the stakeholder : Prashant
   Occupation : teacher
   DOE QUESTION: Did PP provided employment opportunity to locals?
   ANSWER: Yes, employment is generated and the locals are given priority. Assessment team noted that locals were employed for the project activity for the current monitoring period. DOE also like to conclude that during the site visit it was observed that local people were employed for security and operation related work like vegetation improvement and other unskilled work. DOE also found that skilled local persons were also employed by the organization for the operation and maintenance of the power plant.

2. Name of the stakeholder : Mr. Deepak
   Occupation : farmer
   DOE questions: Did the power plant have any harmful impact on farming or vegetations?
   Answer: NO. The plant is implemented in barren land and there were no any fertile land or crop is damaged.

No negative comment has been recieved

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, four CLand 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 on-site 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 1st periodic verification for the project activity.

However, the FARs during transition review and they have been resolved which is as follows:

FAR # 1:

As per TRF para 6.1, the transitioning project will be required to demonstrate Ongoing Financial Need as per the relevant GS rules and requirements available at the time of renewal of crediting period.

RESPONSE : this is the first crediting period which will end on 15/11/2023. PP will ensure that crediting period renewal is done accordingly and Ongoing Financial Need will be demonstrated as per the relevant GS rules and requirements

FAR # 2:

At the time of verification VVB shall check and address double counting and demonstrate that double counting does not exits.

RESPONSE : The Declaration for No-Double counting has been submitted to the VVB mentioning that the "The project activity has not applied for any other certification like Green or White certification. Also a declaration has been made in the MR stating "the project developer will not issue both a CER and a Gold Standard VER for the same vintage from a project that is registered with Gold Standard."VVB has crosschecked the same through various registries like RECs, IRECs etc

2.2 Project Implementation in accordance with the registered PDD

It involves the Installation of 05 projects of 10 MWAC each, totalling to 50 MWAC solar power project under Jawaharlal Nehru National Solar Mission (JNNSM) Phase-II, Batch-II, Tranche – I, State Specific Bundling Scheme (under Open Category). In the same project boundary the projects are installed at Village: Akathauha & Ghutbai, in Tehsil: Charkhari, District: Mahoba, State: Uttar Pradesh.

From the project activity the electricity generated are sold under the Power Purchase Agreement (PPA), signed with NTPC Ltd.. NTPC has been identified by the Government of India (GoI) as the Implementation Agency for setting up of Grid-connected Solar PV Power Projects under State Specific Bundling Scheme under the National Solar Mission of Government of India (GoI). And NTPC Vidyut Vyapar Nigam Limited (NVVN) on behalf of NTPC has purchase Solar Power from Solar Power Developer, and sell it to Discoms. The electricity generated from the project activity evacuated through 132 kV sub-station located at Mahoba for consumption in the Indian Electricity Grid.

The project replaced anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 94,209 tCO2e per annum, thereon displacing 100,020 MWh/year amount of electricity from the generation-mix of power plants connected to the Indian electricity grid, which is mainly dominated by thermal/ fossil fuel based power plant.

The installation of a new grid-connected renewable power plant/unit in the project activity. This is not a CPA that has been excluded from a registered CDM PoA as a result of erroneous inclusion of

.

The crediting period of the project is 16/11/2018 to 15/11/2023 which is as per 10.2.1 of GHG Emissions Reduction & Sequestration Product Requirements v.2.1*"The start date of Crediting Period is the date of start of operation (start of planting for A/R Projects) or a maximum of two years (three* *years for A/R & AGR) prior to the date of Project Design Certification, whichever occurs later."* As the design certification date is 16/11/2020

The project aims to harness solar energy through installation of PV with total installed capacity of 50 MWac. The solar PV power plant have solar PV modules, inverters, transformers and other protection system and supporting components.

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	1		
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		1	
Assessment of data and calculation of emission reductions or net removals		2	
Others (Assessment of SDG outcomes)	1		
Total	4	3	0

2.5 Compliance of the Monitoring Plan with the Methodology

During the document review and furthermore during the site visit, 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:	$EG_{facility,y}$
Data unit:	MWh

Description:	Quantity of net electricity supplied to the grid
Source of data used:	Electricity exported/imported to the grid is in kWh. However for the calculation purpose electricity exported is converted in MWh. 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 UPPTCL Jhansi as per below equation: $EG_{PJ,y} = EG_{Export} - EG_{Import}$ Projects activity comprises of installation of 12 Energy meters (5 main meter and 5 check meter for each 10 MW) at project site(33 KV PDPL Sub-station) and 2 Energy meters (1 main meter, 1 check meter) for joint metering at substation interconnection point(132 KV PDPL Substation). **Meter & Calibration Details:** | **Details** | **Main Meter** | **Check Meter** | | 132KV PDPL SUBSTATION | | | | Meters Sr.No | 17051284 | 17051285 | | 33 KV PDPL SUBSTATION - CHARKHARI | | | | Meters Sr.No | 17051287 17051292 17051294 17051295 17051296 | 17051286 17051288 17051290 17051293 17051298 | | Type | ABT meters | ABT meters | | Manufacturer | L&T Make | L&T Make | | Accuracy | 0.2s | 0.2s | | Last Calibration | 30/03/2017 | 30/03/2017 | | Calibration frequency | Once in 5 years as per CEA guidelines | | **Cross Checking:** Quantity of net electricity supplied to the grid is cross checked from the Invoices/ Monthly Bill raised by the Project Participant to NTPC Limited.
Means of verification/Comments:	VVB has verified the JMR issued by the UPPTCL for the each month and found the generation data in line with the ER sheet. This value has been cross-checked with the invoice raised by PP
Cross-check	Quantity of net electricity supplied to the grid is cross checked from the

	Invoices/ Monthly Bill raised by the Project Participant to NTPC Limited

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 rigistered 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.The ex-ante value for grid emission factor (EF) sourced from latest CEA database in the registered PDD has been correctly applied in the cal-culation of emission reductions.
Cross-check	207,545 tCO_2 emission reductions for the monitoring period. A check meter is also installed near to the export meter to cross check the electricity exported to the grid. The check meter reading would also be used in case of failure of export meter

Data / Parameter:	Quality of employment
Data unit:	Number (training) INR (Salary)
Description:	Number of project employees with Number of male/female, permanent/temporary, age and person with disabilities.
Source of data used:	Training Records (HSE & HR) & Employee feedback forms Salary Slip of the project employees.
Means of verification/Comments:	HR records and salary slip has been verified and found PP has employed 11 employees for this monitoring period. Also, PP has confirmed that total 10 trainings have been provided to their employees during current monitoring period. Following are the training details:

Sr. No	Name of Training	Date Of Training	Number of attendees
1	First Aid training	20/12/2018	06
2	Material Handling (Manual& Mechanical)	23/09/2019	08
3	Safety Training	15/09/2020	08
4	Electrical Safety Training	29/12/2019	10
5	ESMS Training	09/12/2019	13
6	Firefighting Training	23/07/2020	10
7	First Aid Awareness	14/07/2020	11
8	Hazardous chemicals in workplace	17/02/2020	09

	<table><tr><td>9</td><td>LSSR Training</td><td>20/01/2020</td><td>11</td></tr><tr><td>10</td><td>Training on Near miss & Incident reporting</td><td>25/04/2020</td><td>07</td></tr></table> Training records have been checked by the VVB
Cross-check	DOE has corss verified the training records submitted by PP

Data / Parameter:	Quantitative employment
Data unit:	Number of O&M staffs involved in the project
Description:	Total employment generated due to the implementation of project activity
Source of data used:	Plant employment records
Means of verification/Comments:	The total number of O&M staffs employed for the operation & maintenance of the project activity are around 11 The number of persons employed has been verified with the daily log book records. Slaray paid to employees has been verified through salary slips submitted by PP.
Cross-check	The number of persons employed are would be mentioned in the plant register, which can be crossed checked with daily attendance register.

Data / Parameter:	Hazardous and Non-hazardous Waste
Data unit:	-
Description:	The manufacture, trade, release, and use of hazardous and non-hazardous chemicals and/or materials
Source of data used:	Plant Records
Means of verification/Comments:	The waste is disposed to the waste handlers and the firm will comply with all the local laws for monitoring and disposal. For current monitoring period value observed is 0.
Cross-check	Plant records are verified

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.
Source of data used :	Generation statement provided by UPPTCL Jhansi every month.
Means of verification /comments :	Quantity of electricity supplied during current monitoring period is 220,348 MWh. Same has been verified with the JMR submitted by PP. Amount esimated in registered PDD: 100,020 MWh/Annually

<table>
<tr><td>SDG Indicator</td><td>SDG 13: Climate Action</td></tr>
<tr><td>Data Unit :</td><td>tCO_2</td></tr>
<tr><td>Description :</td><td>Reduction in CO2 emission reduction due to implementation of project activity</td></tr>
<tr><td>Source of data used :</td><td>CEA database</td></tr>
<tr><td>Means of verification /comments :</td><td>Estimated ER in the PDD was: 94,209 tCO2/Annually

ER achieved during current monitoring period is:
<table>
<tr><td>Year</td><td>Emission reduction acheived in tCO2</td></tr>
<tr><td>2018</td><td>12,082</td></tr>
<tr><td>2019</td><td>97,004</td></tr>
<tr><td>2020</td><td>98,459</td></tr>
<tr><td>Total</td><td>207,545</td></tr>
</table>

The above data has been checked from the JMR.</td></tr>
</table>

SDG Indicator	SDG 8: Decent work and economic growth
Data Unit :	Number (employees) Number(Trainings) INR (salary)
Description :	Number of Trainings provided to employees & O&M staff Salary given to the employees of the project. The income to all the unskilled workers are made on day to day basis with the minimum being Rs. 350 per day. Annual records of income paid to all the employees are available. Total employment generated due to the implementation of project activity
Source of data used :	Training Records (HSE & HR) & Employee feedback forms. Salary Slip of the project employees

	Plant employment records
Means of verification /comments :	Total 10 training has been given to the employees during current monitoring period. DOE has verified the training records for the same. The trainings provided is as follows <table><tr><td>Sr. No</td><td>Name of Training</td><td>Date Of Training</td><td>Number of attendees</td></tr><tr><td>1</td><td>First Aid training</td><td>20/12/2018</td><td>06</td></tr><tr><td>2</td><td>Material Handling (Manual& Mechanical)</td><td>23/09/2019</td><td>08</td></tr><tr><td>3</td><td>Safety Training</td><td>15/09/2020</td><td>08</td></tr><tr><td>4</td><td>Electrical Safety Training</td><td>29/12/2019</td><td>10</td></tr><tr><td>5</td><td>ESMS Training</td><td>09/12/2019</td><td>13</td></tr><tr><td>6</td><td>Firefighting Training</td><td>23/07/2020</td><td>10</td></tr><tr><td>7</td><td>First Aid Awareness</td><td>14/07/2020</td><td>11</td></tr><tr><td>8</td><td>Hazardous chemicals in workplace</td><td>17/02/2020</td><td>09</td></tr><tr><td>9</td><td>LSSR Training</td><td>20/01/2020</td><td>11</td></tr><tr><td>10</td><td>Training on Near miss & Incident reporting</td><td>25/04/2020</td><td>07</td></tr></table>

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.

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, BEy is calculated as: Project emissions: Project Emissions, PEy = 0 Emission reductions: Calculation of baseline emission is as follows; BEy = EGPJ,y x EFgrid,CM,y = 220,348 x 0.9419

	= 207,545 Where: BEy = Baseline emissions in year y (t CO2/yr) EGPJ,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) EFgrid,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” (t CO2/MWh)
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 03 and corresponding ER calculation spreadsheets and are consistent with the applied methodology ACM0002 version 20.0 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 “50 MW Mahoba Solar PV Power Project by M/s Prayatna Developers Pvt. Ltd. at Mahoba, UP”, GS Reference No. 7137 for the period 16/11/2018 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.

The GSVERs for the current monitoring period 16/11/2018 to 31/12/2020 is 207,545 tco_2

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 an on-site 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:**24/07/2021
Description of CL				
Generation data for the following months are missing: 2018 – November and December 2019 – May to August 2020 – June and November				
Project participant response				**Date:** 23/08/2021
The Generation for the current monitoring period is hereby provided along with this submission to assement team.				
Documentation provided by project participant				
1. Generation Data for the month Nov-2018 and December-2018 2. Generation Data for the month May to August-2019 3. Generation Data for the month June-2020 and November-2020				
DOE assessment				**Date:** 15/09/2021
Generation data is submitted for the requested months. CL is closed				

CL ID	02	**Section no.**		**Date:** 24/07/2021
Description of CL				
PP has to submit the following documents: 1. Calibration details of meters 2. Training records for monitoring period 3. Sample Salary slips 4. Latest photographs of the site 5. ERPA				
Project participant response				**Date:** 23/08/2021
The Calibration certificate of energy meters, training records, sample salary pay slip, latest site photographs & ERPA document for this monitoring period is hereby provided along with this submissions to the assessment team.				
Documentation provided by project participant				

1. Calibration certificate of energy meters 2. Training records for current monitoring period 3. Sample Salary Pay slip 4. Latest Site photographs 5. ERPA document for project tilte: 50 MW Mahoba Solar PV Power Project by M/s Prayatna Developers Pvt. Ltd. at Mahoba, UP

DOE assessment	**Date:** 15/09/2021
Requested documents have been submitted CL is closed.	

CL ID	03	**Section no.**	A.2	**Date:** 24/07/2021
Description of CL				
Please clarify the implementation status of the project, statement made "The Project will be located at Akathauha village of Mahoba district, in the Indian state of Uttar Pradesh" in the section is confusing.				
Project participant response				**Date:** 23/08/2021
Earlier, section A.2, the Location of the project mentioned in the monitoring report was in the future tense. Thus, the language has been reframed as the project is already up and running.The language has been corrected throughout the revised monitoring report. The Revised MR Version 2.0 is provided along with this submission to the assessment team.				
Documentation provided by project participant				
1. MR Version 2.0				
DOE assessment				**Date:** 15/09/2021
MR has been revised, CL is closed				

CL ID	04	**Section no.**	E.5 and ER sheet	**Date:** 24/07/2021
Description of CL				
Value of number of emplyees are inconsistent in MR and ER sheet				
Project participant response				**Date:** 23/08/2021
The total number of employees has been corrected in MR and ER sheet. The value of Number of employees is 22.				

year	No. of employees
2019	11
2020	11

The Revised MR Version 2.0 and ER sheet Version 2.0 is provided along with this submission to the assessment team.
Documentation provided by project participant
1. MR-Version 2.0 2. ER sheet-Version 2.0

DOE assessment	Date: 15/09/2021
MR and ER sheet has been made consistent. CL is closed.	

Table 2. CAR from this verification

CAR ID	01	**Section no.**	D.2	**Date:** 24/07/2021
Description of CAR				
Value of SDG indicator has not been mentioned in the section D.2				
Project participant response				**Date:** 23/08/2021
Value of SDG indicator has been included in section D.2 of revised MR. The Revised MR Version 2.0 is provided along with this submissions to the assessment team.				
Documentation provided by project participant				
1. MR-Version 2.0				
DOE assessment				**Date:** 15/09/2021
Revised MR has the SDG indicator. CAR is closed				

CAR ID	02	**Section no.**	D.2	**Date:** 24/07/2021
Description of CAR				
Numbers of energy meters are not consistent in the MR. PP has to mention the correct numbers and provide the calibration details in the MR.				
Project participant response				**Date:** 23/08/2021
The Project activity has a total of 12 energy meters installed. Two Energy meters (1 main meter and 1 check meter for each 10 MW i.e. 5*2=10 meters) at the project site and 2 Energy meters (1 main meter, 1 check meter) for joint metering at the substation interconnection point. The total number of energy meters has been included in Section D.2 of the revised MR. A calibration certificate of energy meters is provided along with this submission to the assessment team.				
Documentation provided by project participant				
1. MR-Version 2.0 2. Calibration certificate of energy meters				
DOE assessment				**Date:** 15/09/2021
Calibration records and revised MR submitted. CAR is closed				

CAR ID	03	**Section no.**	ER sheet	**Date:** 24/07/2021
Description of CAR				
PP has to provide the generation break up of all the 5 projects involved in 50 MW.				

Project participant response	**Date:** 23/08/2021
The project activity involves installation of 05 projects of 10 MWAC each, totalling to 50 MWAC. The clear energy generation breakup for each 10 MW projects is included in the ER Sheet-Version 2.0.	
Documentation provided by project participant	
1. ER sheet-Version 2.0	
DOE assessment	**Date:** 15/09/2021
Revised ER sheet and MR recieved. 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)	Addi-tional Infor-mation (Rele-vance in CDM Context)
1.	Adani Green Energy Limited (AGEL)	GS 7137 Revised PDD version 4	25/09/2020	
2.	AGEL	GS 7137 Monitoring Report version 01	05/07/2021	
3.	AGEL	GS 7137 Monitoring Report version 05	15/05/2022	
4.	Gold Standard	GS 7137 project page		
5.	AGEL	GS 7137 ER calculation sheet version 01	05/07/2021	
6.	AGEL	GS 7137 ER calculation sheet version 05	15/05/2022	
7.	AGEL	Field data sheets for ER and SDG monitoring	2018-2020	
8.	AGEL	Emplyees HR record	2018-2020	
9.	AGEL	Sample salary slips of employees	2018-2020	
10.	AGEL	List of Employees	2018-2020	
11.	AGEL	Training records	2018-2020	
12.	AGEL	Transition review documents	2022	
13.	AGEL	JMRs and Invoices raised to the electricity board	2018-2020	
14.	AGEL	Greviance register	2018-2020	
15.	AGEL	Design review final pdf	03/01/2021	
16.	AGEL	Declaration of no double accounting	2019-2021	
17.	AGEL	GS 7137 Monitoring Report version 06	14/06/2022	

South Asia

Annex 3
Appointment Certificates

South Asia

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

South Asia

CERTIFICATE OF APPOINTMENT

Mr. Murty, Eswar 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)	1.1, 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 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-0031/011.

Date	Signature
01/06/2020	

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

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ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

CERTIFICATE OF APPOINTMENT

Mr. Kewat, Shailendra fulfills 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, 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 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-0105/001.

Date	Signature
01/06/2020	

IS-CMS-CB-POG-01/06, version 03

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