

GS4GG Verification (Performance) Certification Report



Certification Pvt. Ltd.

VKU Certification Pvt. Ltd.

Regd. Off: Prakoshth Number No. 1-S, Leaf Tower, Second Floor, Plot No. 01, IRIS LEAF Gram Talawali Chanda, Indore 453771 (M.P.)
India.

URL: <http://vkucertification.com> | e-mail: info@vkucertification.com

Project Title
120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat

Registry Project ID: GS_7572
Monitoring Period: **01/01/2024 – 30/06/2024**

For
Infinite Environmental Solutions Limited

VKU Project Reference No.
VKU.VER.33.24_GS_7572

Executive Summary:

A) Basic information		
Project Title	120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat	
GS4GG Project ID:	7572	
Date of Project Design Certification	09/11/2020	
Last Date of Annual Report	06/12/2023	
VKU Project Reference No.	VKU.VER.33.24 GS 7572	
Sectoral scope	Scope: 01 Energy Industries (renewable- and non-renewable sources)	
Methodology/ies applied	ACM0002: Version 20.0	
Technical Area (TA)	T.A 1.2	
Host country	India	
Location	The project activity is located in Sabarkantha, Banas kantha and Aravali district in Gujarat, India.	
Project Representative	Infinite Environmental Solutions Limited	
Project Developer/Investor	Juniper Green Sigma Private Limited	
GS4GG Activity Requirements	Renewable Energy Activity	
GS4GG Certified Product	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A	
Selected Sustainable Development Goals and GS4GG SDG Impact Statement		
	SDG 7	Affordable and Clean Energy 160,978.41 MWh of renewable energy generated/per monitoring period
	SDG 8	Decent Work and Economic Growth Trainings - 15 number of trainings in current monitoring period

		Employees - 23 ¹ Number of Employees in current monitoring period Income Generation- INR 5,238,725
	SDG 13	Climate Action (Mandatory) 151,625 tCO2e (GS VERs)
Scale of Project Activity	Large Scale	
B) Verification		
Start date of crediting period	09/11/2020	
End date of crediting period	08/11/2025	
Monitoring Period	01/01/2024 – 30/06/2024 (both dates included)	
C) Monitoring report	Version	Date
Initial	01	08/07/2024
Final	05	17/12/2024
D) Performance Certification report	Version	Date
Initial	1.0	24/09/2024
Final	4.0	17/12/2024
E) Verification Team		
Team Leader ²	Barun Kumar	
Technical Expert (T.A.1.2)	Barun Kumar	
Validator/Verifier- Trainee	Sanjana Bhana	
Local Expert (India)	Barun Kumar	
F) Approvals		
Technical Reviewer ³	Sunil Kathuria	
Technical Expert (TA 1.2)	Sunil Kathuria	
G) Final opinion		
VKU Certification has performed the seventh verification of the GS4GG project “120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat” with GS4GG 7572 as Reference Number under the first crediting period. As described in this report from sections 1 to 3, VKU has performed the entire verification according to the verification criteria and their GHG emission reductions or removals set out in GS4GG Validation and Verification Standard Version 1.0 /5/. The project developer of the “120 MW Solar		

¹ Including 4 new employees were hired during current monitoring period

² Team Leader is an approved GS Auditor for VKU.

³ Technical Reviewer is an approved GS Auditor for VKU.

PV Plant by Juniper Green Sigma Private Ltd. in Gujarat” are responsible for:

- The preparation of greenhouse gas emissions data and the reported greenhouse gas emission reductions for the project on the basis set out in the monitoring plan contained in the registered GS4GG PDD version 6 of 11/01/2021 /13/.
- The development and maintenance of records and reporting procedures are following that plan, including the calculation and determination of greenhouse gas emission reductions of the project.

The verification includes confirmation about the implementation in the PDD/13/monitoring plan and the monitoring methodology as per **ACM0002 “Grid-connected electricity generation from renewable sources – Version 20.0** /12/. VKU Certification confirms that the monitoring system is in place and the emission reductions are calculated without material misstatements. All the supporting documents including ERSheet /15/, PPA /27/, O & M declaration /26/, commissioning certificates /16/, calibration certificates /28/, SEAs /24/, invoices /25/, training records /21/, etc. were checked. VKU’s verification approach is based on understanding the risks associated with reporting, analysing the data associated with GHG emission calculations to mitigate any sort of material misstatements. VKU planned and performed the verification by adopting an evidence-based approach to rely on different sorts of data, other information, and explanations. VKU assures to provide a **Reasonable level of assurance** that reported GHG emission reductions are fairly stated and correctly calculated. It is VKU’s opinion that the GHG emission reduction stated in the monitoring report version 05 dated 17/12/2024 /14/ and ER sheet version 3 dated 17/12/2024/15/ for the project- “120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat” is fairly stated. The emission reductions from the GS4GG project activity ID 7572 during the monitoring period **01/01/2024 – 30/06/2024** (both dates included) amounts to **151,625 tCO₂e (SDG 13)**. The equivalent energy generated amounts to **160,978.41 MWh (SDG 7)** and **23** peoples employed; **15** trainings have been provided and the total income generated for the current monitoring period given to employees **INR 5,238,725**.

The assessment team meticulously followed a number of steps prescribed in the ISO standard 14064-3 /9/ to reach the conclusion, starting with Strategic Analysis, followed by Risk Assessment, and the development of an Evidence Gathering plan. Subsequently, the team diligently executed the planned activities to collect the necessary evidence. To ensure a comprehensive planned evaluation, an Audit plan was prepared before the remote site visit, and was conducted accordingly. Remote visit activities were carried out following the pre-established Evidence Gathering plan. Following the remote inspection /29/, post-site evaluation was conducted adhering to verification values which involved scrutinizing supporting documents, and verifying the claims of Monitoring Reports (MR) /14/, along with calculations of Emission Reports (ER) /15/.

The final report prepared after following the previously mentioned procedure follows an Independent Technical review by an experienced Technical Reviewer. Adhering to the mandatory requirements of the standard, the assessment team established a positive opinion based on the findings raised and addressed them individually.

VVB Opinion	Conclusion
Positive	☒ (Mark Tick if applicable)
Negative	☐ (Mark Tick if applicable)

Therefore, VKU certification recommends a request of Issuance to GS4GG.	
H) Authorization	
Director	Vikas Kumar Aharwal
Date	18/12/2024
I) Distribution	
No public distribution without written confirmation from client.	
J) Verification Status	
Findings closed	Yes
Draft report	Yes
Final report	Yes

Abbreviations

CAR	Corrective Action Request
CDM	Clean development mechanism
CERs	Certified Emission Reductions
CL	Clarification Request
EB	Executive Board
ERs	Emission Reductions
FAR	Forward Action Request
FVR	Final Verification Report
GHG	Greenhouse Gas(es)
GHG	Green House Gas
GS4GG VVS	Gold Standard Validation and Verification Standard
GSS	Grid Sub Station
IPCC	Intergovernmental Panel on Climate Change
MR	Monitoring Report
GETCO	Gujarat Energy transmission Corporation Ltd
O&M	Operation and Maintenance
OM	Operating Margin
PDD	Project Design Document
PE	Project Emissions
PPA	Power Purchase Agreement
PSA	Power Sale Agreement
PV	Photovoltaic
RCP	Renewable of Crediting Period
Ref.	Document Reference



RMP	Revised Monitoring Plan
RSV	Remote site Visit
SCADA	Supervisory Control and Data Acquisition
SECI	Solar Energy Corporation of India
TA	Technical Area
TR	Technical Reviewer
VERs	Verified Emission Reductions
VKU	VKU Certification Ltd.
VT	Verification Team
VVB	Validation and Verification Body
VVS	Validation and Verification Standard
SEA	State Energy Accounts
CM	Combined Margin
BM	Build Margin

Table of Contents

Executive Summary:	2
Abbreviations:	5
1. introduction	9
1.1 Project Summary	9
1.2 Objective	11
1.3 Scope and Criteria	12
1.4 Level of Assurance and Application of Materiality	14
1.5 Information of VVB	15
1.6 Sustainable Development Contributions	16
2. Methodology	16
2.1 Desk Review or Document Review	17
2.2 Site Visits (Remotely conducted)	18
2.3 Reporting of Findings	26
2.4 Technical Review	27
3. Verification Findings	27
3.1 Description of project	29
3.1.1 General description of project	29
3.1.2 Location of Project	29
3.1.3 Reference of applied methodology	30
3.1.4 Crediting period of Project	30
3.2 Remaining Issues (FAR(s) from validation or previous verification)	31
3.3 Post registration changes	31
3.4 Description of monitoring system applied by the project	33
3.4.1 Compliance of monitoring plan with monitoring methodology	38
3.4.2 Compliance of monitoring activities with the registered Monitoring plan	39
3.4.3 Compliance with the calibration frequency requirements for measuring instruments	44
3.5 Assessment of data and calculation of emission reductions or net removals	46
3.5.1 Calculation of baseline values or estimation of baseline situation of each SDG Impact	46
3.5.2 Calculation of project value or estimation of project situation of each SDG Impact	48
3.5.3 Calculation of Leakage	54
3.5.4 Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks	54
3.5.5 Comparison of actual emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD	55
3.5.6 Remarks on difference from estimate value in registered PDD	56
3.6 Safeguards Reporting	57
3.7 Stakeholder inputs and legal disputes	58

3.7.1	List all Inputs and Grievances which have been received via the Continuous Input and Grievance Mechanism together with their respective responses/mitigations.	58
3.7.2	Report on any stakeholder mitigations that were agreed to be monitored.	59
3.7.3	Details of legal contest that has arisen with the project during the monitoring period	59
3.8	Quality of evidence to determine emission reductions	59
3.9	Management system and quality assurance	60
3.10	Verification Assessment	60
3.11	Verification Opinion	61
4.	<i>Reference/Documents used in the verification</i>	62
5.	<i>Certification Statement.....</i>	65
6.	<i>VERIFICATION findings (CAR/CL/FAR).....</i>	67
7.	<i>competence of verification team and technical reviewers</i>	74
	<i>History of the Document</i>	72

1. INTRODUCTION

1.1 Project Summary

The main purpose of the project activity is to generate electrical energy through sustainable means by utilizing solar power resources, the generated green electricity is contributing to climate change mitigation efforts. This project activity is a large-scale grid-connected Solar PV project. The project activity is a 120 MW_{AC} Solar PV technology-based grid-connected solar power generation project and Juniper Green Sigma Private Limited is the project owner for the project activity. The project entails installation of 431,284 photovoltaic modules with rated capacity of 405 Wp (Number of modules- 322,028) & 410 Wp (Number of modules- 109,256) respectively.

The project activity is located at three sites Babsar Village of Sabarkantha District, Bhordu Village of Banaskantha District, Bilvaniya and Vantda Suka villages of Aravalli District in the Gujarat state of India. The project activity is connected to Unified Indian Grid. Under this project activity, 120 MW_{AC} of Solar PV technology is being implemented at the above-mentioned project locations.

Verification is conducted for seventh monitoring period from 01/01/2024 – 30/06/2024 (both dates included) under the first crediting period 09/11/2020 to 08/11/2025 (both dates included) with regards to the relevant requirements for GS4GG activities. The project activity is reducing anthropogenic emissions of greenhouse gases (GHG's) 151,625 tCO₂, thereon displacing 160,978.41 MWh amount of electricity from the generation of power plants connected to the Indian electricity grid, which is mainly dominated by thermal/ fossil fuel-based power plant.

All the SDGs included in the project activity SDG 7- 160,978.41 MWh, SDG 13- 151,625 tCO₂e, SDG 8- Trainings- 15 Nos of trainings in current monitoring period, Employees- 23 Nos of Employees in current monitoring period (including 4 new hires in current monitoring period), Income- Salary INR 5,238,725 were verified via supporting documents and is found to be in compliance as per the GS4GG requirements.

The details of the project are mentioned in the table below:

Project Investors' Name	Commissioning Date	Capacity in MW	Location
Juniper Green Sigma Private Limited	17/10/2020	25 MW	Village Bilvaniya, Vantda Suka, Tal. - Dhansura, Dist- Aravali
	19/10/2020	25 MW	Village Babsar, Tal- Vadali, Dist. - Sabarkantha
	28/11/2020	10 MW	
	28/11/2020	20 MW	Village Bilvaniya, Vantda Suka, Tal- Dhansura, Dist. - Aravalli
	09/12/2020	25 MW	

	17/12/2020	15 MW	Village-Bhordu, Tal-Tharad, Dist.- Banas kantha
--	------------	-------	---

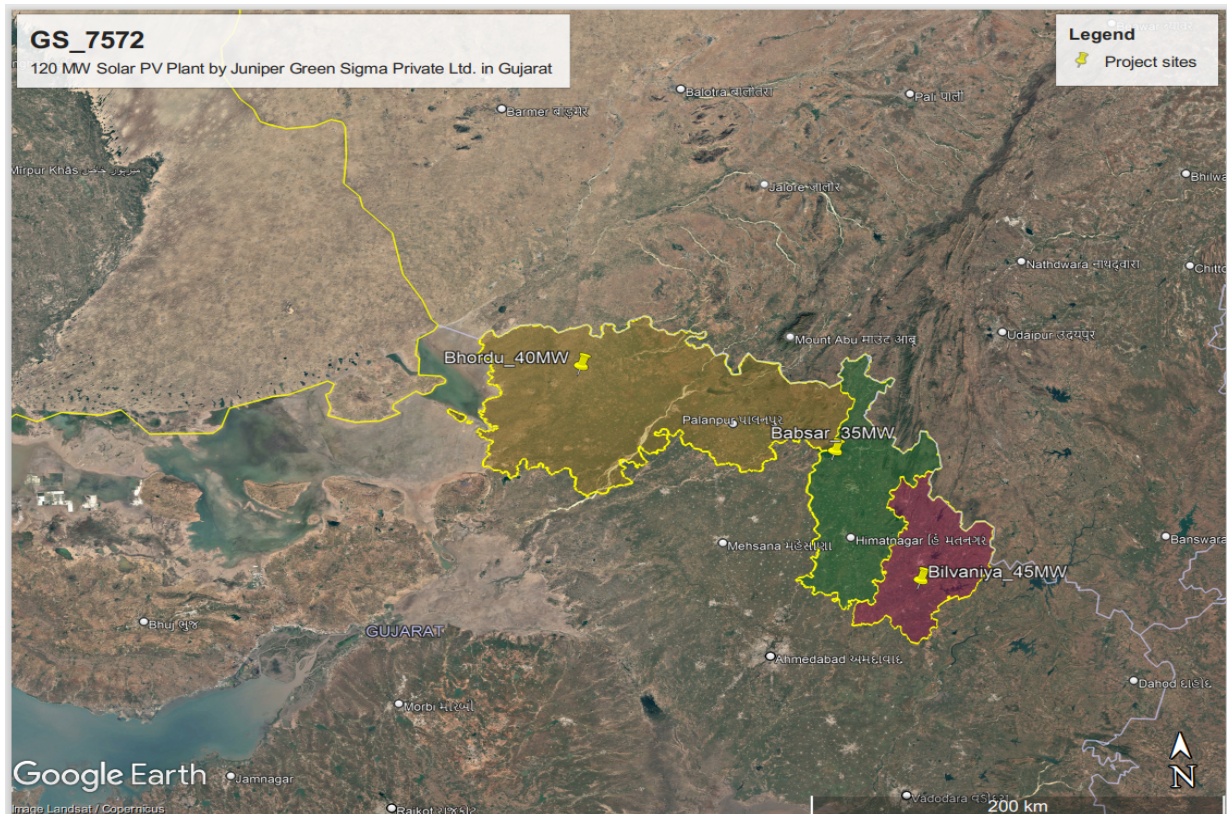
The above mentioned commissioning dates of all the sites are verified via commissioning certificates/16/ provided by PD.

Project activity is connected to Unified Indian Grid. Under this project activity 120 MW of Solar PV technology is being implemented at the below location.

The following table mentions the Latitude and Longitude of the project location which are verified via google earth pro software/30/

S.No.	Capacity	Village	District	Coordinates
1	45 MW	Village Bilvaniya, Vantda Suka, Tal. - Dhansura	Aravali	23°19'36.21"N 73°17'00.03"E 23°19'27.63"N 73°16'52.46"E
2	35 MW	Village Babsar, Tal-Vadali	Sabarkantha	23°58'32.67"N 72°54'26.79"E 23°58'35.60"N 72°54'41.21"E
3	40 MW	Village-Bhordu, Tal-Tharad	Banaskantha	24°25'33.88"N 71°44'21.61"E 24°25'36.10"N 71°44'07.59"E

Following Figure depicts the location of all the three sites of the project activity as verified via google earth pro/30/



The project activity has been in operation during the current monitoring period and the same has been crosschecked from review of state energy account (SEA) /24/ & breakdown records /37/ confirmed during remote interviews/31/ with PD. No unusual activities observed during the monitoring period. No forced or major breakdown observed and the same is confirmed by the assessment team with the plant log details and SEAs/24/.

The verification team has reviewed the commissioning certificates /16/ & PPA signed between Gujarat Urja Vikas Nigam Limited (GUVNL) and Juniper Green Sigma Private Ltd. (JGSPL) dated 21/05/2019 /27/ to conclude that the capacity of the project is same as mentioned in the registered GS PDD. The capacity of the project activity has not changed after the registration of the project activity and same have been confirmed from the commissioning certificate /16/, PPA /27/ and state energy accounts /24/ issued by State Utility i.e. Gujarat Energy transmission Corporation Ltd and Invoices raised by the PD towards state utility/25/.

Through the review of registered previous verification reports /20/ the assessment team could confirm that there is one correction in previous monitoring period. The correction is in regards the estimated value of Parameter EG facility, y i.e. Quantity of net electricity supplied to the grid reported under SDG 7 in section B.7.1 of the registered GS PDD version 6.0 dated 11/01/2021. This value was mistakenly considered without using the degradation factor (0.70%) and it was corrected and approved in the previous monitoring periods and further details of the same is mentioned in section 3.3 of this report. The capacity of the project is 120 MW which is more than 15 MW and thus it qualifies as large-scale project activity. Plant is located in Gujarat state of India. Assessment team also checked the locations of the project activity through the interviews, google earth pro/30/ and cross checked the same with that mentioned in the registered PDD and the validation report /19/. Thus, locations provided in MR are found inline with registered documents of the project activity and are as stated in table above. The project is connected to Unified Indian grid (as per the grid structure of India) and the same is found correct by the assessment team during the review of commissioning certificate, PPA and remote interviews with PD/27/.

Thus, assessment team confirms that the project is implemented as per the registered PDD except the above correction taken in previous monitoring periods. AT could confirm that it does not impact the additionality of the project.

1.2 Objective

Infinite Environmental Solutions Limited (Project Representative) has contracted with VKU Certification Private Limited (hereafter referred as VKU Certification) to conduct seventh verification and certification of emission reductions reported for the **GS4GG 7572** project activity “**120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat**” in India for the current monitoring period **01/01/2024 – 30/06/2024** (both dates included)

under first crediting period from 09/11/2020 to 08/11/2025 (both dates included). The project activity follows a renewable crediting period of 5 years, which can be extended by a maximum of two times, as outlined in section C.2 of GS4GG PDD Version 6 dated 11/01/2021/13/.

This report contains the verification findings and the process conducted, conclusive certification statement for the verified emission reductions.

The verification is the periodic independent review and ex post determination by VKU Certification of the monitored reductions in GHG emissions that have occurred as a result of the registered GS4GG project activity during a defined monitoring period. Certification is the written assurance by VKU Certification that, during a specific period in time, a project activity achieved the emission reductions as verified.

The objective of this verification is to verify and certify the emission reductions reported by the stated project as per GS4GG validation and verification standard v 1.0 para 1.1, 9.1 and sub para 9.1.1/5/.

The objectives establish that:

- The project activity has been implemented and operating as per the registered GS4GG PDD/13/ and that all physical features (technology, project equipment, and monitoring) of the project are found to be in place;
- Monitoring report/14/ and other supporting documents are complete and sufficient to confirm the claims stated by the PD;
- The data is recorded and stored as per the monitoring methodology and approved monitoring plan priorly established.
- To confirm that the monitoring system is implemented and fully functional to generate Verified Emission Reductions (VERs) without any double counting as per the Self Declaration by the PD /35/.
- To establish that the data reported are accurate, complete, consistent, transparent, and free of material error or omission by checking the monitoring records and the emissions reduction calculation.

1.3 Scope and Criteria

The scope of this verification is the independent objective review and ex-post determination of the monitored reductions in GHG emissions from the “120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat”. The verification of this project is based on the validated & registered GS4GG PDD Version 6 dated 11/01/2021 /13/, Monitoring report version 05

dated 17/12/2024 /14/ and ER sheet version 3 dated 17/12/2024 /15/ along with supporting documents submitted by the project representative to the VKU verification team. The documents thus submitted to the VKU Assessment team have been reviewed against the following guidance and protocol:

1. GS4GG validation and verification standard v1.0 para 1.2 /5/
2. GS4GG validation and verification standard v1.0 para 9.7.2 /5/
3. GS4GG principles requirements v1.2 /1/
4. CDM validation and verification standard for project activities v 3.0 para 2 /36/
5. VKU Quality Manual and Processes
6. Methodology applied by project- ACM0002- “Grid-connected electricity generation from renewable sources” V-20.0 /12/
7. Tools utilized by the project-
 - Tool 7 to calculate the emission factor for an electricity system- V 07 /18/
 - Tool 1 for the demonstration and assessment of additionality V 07 /18/

The steps involved are as follows:

- To assess the project’s compliance with other relevant rules including the host country (India) legislation.
- To confirm that the monitoring system is implemented and fully functional to generate verified carbon units (VERs) without any double counting.
- To verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan.
- To evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement & is sufficiently supported by evidence.
- The verification process ensures that the reported emission reductions are comprehensive and accurate in order to obtain certification.

The verification method and criteria encompassed several phases, including various audit techniques as listed below: -

1. Desk Review of GS4GG project design document version 6 dated: 11/01/2021/13/, and supporting documents listed in Section 04 of this report, which is provided by the Project Representative to assessment team.
2. Remote visit and Interview with stakeholders
3. Reporting, calculation checks, QA/QC and resolution of findings

4. Drafting of verification report
5. Independent technical review of the project documentation
6. Completeness/ Quality Check, and
7. Issuance of the final verification report

During the process Outstanding issues 02 CARs and 03 CLs have been raised and also closed successfully, leading to the issuance of the final verification report. It is to be noted that there is 01 FAR (Forward Action Request) raised during current monitoring period.

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

1.4 Level of Assurance and Application of Materiality

All the revisions of the verification report before being submitted to the client have been subjected to an independent internal technical review to confirm that all verification activities has been completed according to the pertinent VKU's procedure, with a **Reasonable level of assurance**, as per the GS4GG validation and verification standard v1.0 and GS4GG Principles and Requirements v1.2.

VVB applies the general requirements, consideration of materiality in planning verification and for conducting verification is as per the GS4GG validation and verification standard v1.0, para 9.6 for the identification of materiality threshold VVB referred para 9.6.3 of validation verification standard v1.0 and apply to the total emission reduction actually achieved by the Project Activity.

As per para 9.6.3 (c) It is concluded that, the materiality threshold applicable to the project activity based on actual emission reductions achieved is 2% of 151,625 tCO₂e which is equal to 3,032.5 tCO₂e.

As per the GS4GG validation verification standard section 9.6, the level of assurance of the verification report falls under reasonable level of assurance engagements with respect to material errors, omissions, and misrepresentations.

Table 01. Describing the materiality threshold of the project

Application of Materiality Threshold as per the GS4GG VVS v1.0 para 9.6.3	Materiality threshold value (tCO ₂ e)	Reported ERs (tCO ₂ e)		Justification (If any deviation)
		In Initial MR	In Final MR	
2%	3,032.5 tCO ₂ e	150,853 tCO ₂ e	151,625 tCO ₂ e	Based on the GS4GG Validation and Verification Standard

				v1.0, para 9.6.3(b), the materiality threshold for the project activity is 2% of the total emission reductions achieved with a total of 151,625 tCO₂e, this threshold amounts to 3,032.5 tCO₂e. Even though there is a discrepancy between the actual emission reductions⁴ reported in the Initial MR (150,853 tCo₂) and the Final MR (151,625 tCo₂), the project remains classified as a large-scale project. The annual emission reductions fall within the range of 300,000 tCo₂ CO₂e which is 275,350 tCo₂ (after correction made in fifth monitoring period i.e.) as verified through the previous verification reports/20/ and registered PDD/13/. PD has submitted the SEA and invoices for current monitoring period and these documents have been reviewed and verified by the assessment team, and their accuracy has been confirmed.
--	--	--	--	---

1.5 Information of VVB

Table 02. VVB Information

Name of the VVB	VKU Certification Private Limited
GS accreditation expiry date	20-June-2026

⁴ The supporting documents, including the SEA and invoices for June 2024, were not initially provided. However, PD has submitted these documents for the current monitoring period, along with the revised ER sheet V02 (final). These have been verified and found to be correct.

Is the VVB accredited for the applicable sectoral scope?	Yes
Name, position of the approver of the verification report	Sunil Kathuria (Technical Reviewer)
Signature	
Name, position of the authorized signatory for issuance of the verification report	Vikas Kumar Aharwal (Director)
Signature (Final version only)	

1.6 Sustainable Development Contributions

Table 03: Sustainable Development Contributions for verification

Sustainable Development Goals Targeted	SDG Impacts	Estimated Values for current Monitoring period	Actual Values for current Monitoring period	Units
7 Affordable and Clean Energy	MWh of renewable energy generated	145,767.04	160,978.41	MWh
8 Decent Work and Economic Growth	Training/ Employment/ INR	Training- 1 Employees- 15	Training- 15 Events Employees- 23 Income- 5,238,725	Number of Training, No. of Employee Annum INR
13 Climate Action (Mandatory)	Emission Reduction	137,297	151,625	tCO ₂ (GS-VERs)

2. METHODOLOGY

VKU Certification assessed and determined whether the implementation and operation of the project activity, and the steps taken to report emission reductions comply with the GS4GG criteria and relevant guidance provided by the GS4GG impact registry.

The assessment involved a desk review of relevant documentation as well as a remote site visit. The personnel employed and their roles in this assessment is mentioned below;

Verification Team members

S.No.	Full Name	Role(s)	Type of Resource	Type of Activity(ies) carried out
1.	Barun Kumar	Team Leader cum Technical Expert (TA 1.2)	Internal Resource	DR/RSV/I/VF/FVR ⁵
2.	Sanjana Bhana	Validator/Verifier - Trainee	Internal Resource	DR/RSV

Technical Reviewer(s) and approver(s) of the verification report

S.No.	Full Name	Role(s)	Type of Resource	Type of Activity(ies) carried out
1.	Sunil Kathuria	Technical Reviewer cum Technical Expert (TA 1.2)	External Resource	Technical Review

The competence statement of verification team members is included under Section 7 of this report.

Verification milestones:

Monitoring report submission:	08/07/2024
Remote assessment and Interview:	12/07/2024
Draft Verification Report	24/09/2024
Final Verification Report	17/12/2024

VKU Certification has followed a rule-based verification approach, wherein, the contract review is undertaken as per valid/effective version of GS4GG accreditation Standard. Once the contract is agreed for verification, the monitoring report of the project activity submitted to VVB for further process. Key steps are described in Section 2.1 to 2.4 of this report.

2.1 Desk Review or Document Review

VKU Certification conducted a desk review as under;

- A review of the data and information presented to verify their completeness;
- A review of the monitoring plan, the monitoring methodology including applicable tool(s) and, where applicable, the applied standardized baseline, paying particular attention to the frequency

⁵ DR- Desk Review
RSV- Remote Site Visit
I-Interview
VF-Verification findings
DVR-Draft Verification Report
FVR- Final Verification Report

of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures;

- 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;

In addition to the monitoring documentation, VKU Certification has reviewed;

- The GS4GG PDD version 6 of 11/01/2021/13/and the monitoring plan, including any approved revised monitoring plan and/or changes from the registered PDD, and the corresponding validation opinion;
- The Validation Report Version 2 dated 11/09/2020 /19/;
- Previous verification reports /20/;
- The applied monitoring methodology (ACM0002 V.20) /12/ and, where applicable, the applied standardized baseline;
- The monitoring report (all versions) to verify that it is as per the standardized format;
- Any other information and references relevant to the project activity's emission reductions (e.g., IPCC reports, data on electricity generation in the national grid or laboratory analysis and national regulations).

The complete list of documents reviewed is included under Section 4.

2.2 Site Visits (Remotely conducted)

The project activity is located in India at Sabarkantha, Banas kantha and Aravali district in the state of Gujarat. Further the location along with longitude and latitude is mentioned in section 3.1.2. of this report.

This is seventh verification of project activity and the last onsite visit was performed during fifth verification period on 14-April-2023 which was conducted by VKU Certification Pvt. Ltd. for the monitoring period spanning from 01-January -2023 to 30-June-2023 (including both days). As per Clause 3.1 of the "Site Visit and Remote Audit Requirements and Procedures" remote audit is applicable for the current verification. To meet the client's request and comply with the GS4GG "Minimum Site Visit Requirements by VVB" and VKU's quality management system, VKU Certification conducted a remote audit on 12/07/ 2024 to carry out the following:

- An assessment of the implementation and operation of the registered project activity as per the registered PDD version 06 dated 11/01/2021 /13/;
- A review of information flows for generating, aggregating and reporting the monitoring parameters;
- Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PDD;
- A cross check between information provided in the monitoring report and data from other sources such as plant logbooks, state energy accounts /24/, Invoices /25/ and other data sources listed in section 4 of this report;
- A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PDD, the applied methodology including applicable tool(s), and, where applicable, the applied standardized baseline;

- A review of calculations and assumptions made in determining the GHG data and emission reductions;
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

Verification Team also confirm that there is no deviation(s) to address a non- compliance with the minimum site visit requirement as per the GS4GG applicability of minimum site visit requirement by VVB” dated 16/08/2021 v 2.0 /7/

Remote Audit

A remote inspection /29/ has been performed by the assessment team.

The use of Information Communication Technology (ICT) has been done during the remote audit, VKUF65W “Remote audit planning term sheet for use of ICT” has been used to confirm the risk associated for conducting the remote audit which is in line with the GS4GG regulatory framework and VKU’s QMS requirement and it is confirmed that, this project activity location has not any GDPR (General Data Protection Regulation) restrictions. It is also confirmed while ICT network for voice, and video call during test call conduction by assessment team.

Representatives of the PD and in-house O&M team and local stakeholders were interviewed /41/ by assessment team on 12/07/2024 at all the three sites i.e. at Babsar Village of Sabarkantha District, Bhordu Village of Banaskantha District, Bilvaniya and Vantda Suka village of Aravalli District of project implemented in Gujrat state, India

As per para 2.C and 6.6.5 of GS Site Visit and Remote Audit Requirements and Procedures – V2.0 AT has followed “Remote audit techniques” which is also in line with the “Applicability of minimum site visit requirement by VVB” /6/. Risks of remote audit assessed by the assessment team are mentioned below:

Sl. No.	Scope of Assessment	Risks Identified	Audit techniques & Conclusion
1.	Location of project	Low Risk	Audit Technique: Desk review & interviews Appropriateness of Audit Technique: Google Earth Pro software has been utilized to verify the project location, given its credibility and reliability as an authentic tool for geospatial analysis. Conclusion: The assessment team concludes that the risk associated with the project's location is low. This conclusion is based on the findings from the remote audit, which included interviews with the PD representatives and local stakeholders, alongside

			verification through Google Earth Pro /30/, the same is assessed in section 3.1.2 of this report.
2.	Calibration frequency of measuring equipment	Low Risk	Audit Technique: Desk review & interviews Appropriateness of Audit Technique: Calibration records from an NABL-accredited laboratory were verified to ensure the accuracy and reliability of the measuring equipment. Conclusion: The assessment team concludes that the risk associated with the calibration frequency of the measuring equipment is low. This has been confirmed during the remote audit through interviews with the PD representative and staff available at the time of the remote audit. The calibration was performed by an NABL-accredited laboratory, ensuring its accuracy and compliance.
3.	Data and parameters fixed ex ante	Low Risk	Audit technique - Desk review & interviews Appropriateness of audit technique- it has been verified via GS4GG registered PD and CDM applied methodology Conclusion - Assessment team concludes that there is low risk in fixed ex ante parameters mentioned in Section D.1 of Monitoring Report; version 05 dated 17/12/2024 as these parameters are based on the applied CDM methodology and sourced from <u>CEA database</u>.
4.	Data and parameters to be monitored	Low Risk	Audit technique - Desk review & interviews Appropriateness of audit technique- desk review of State Energy Accounts issued by GETCL which is a government entity, invoices raised by PD to GETCL, training records and employment records during remote audit. Conclusion Assessment team concludes that there is low risk in Data and parameters to be monitored mentioned in Section D.2 of Monitoring Report; version 05 dated 17/12/2024 as these parameters are

			based on the applied CDM methodology. It is further assessed in section 3.4.2.2 of this report.
5.	Other elements of monitoring plan	Low Risk	Audit technique - Desk review & interviews Appropriateness of audit technique- Desk review of declaration regarding expense on letter head of PD, Calibration records (by an NABL accredited laboratory, SLD has been checked during remote audit and training records verified Conclusion Assessment team concludes that there is low risk in other elements of monitoring plan mentioned in section C of Monitoring Report version 05 dated 17/12/2024 and it has been verified via interviews during the remote audit and through the desk review above mentioned supporting documents.
6.	Stakeholder mitigation measures	Low Risk	Audit Technique: Desk review & interviews Appropriateness of Audit Technique: The audit technique involved reviewing the grievance register and conducting interviews with the PD representatives and local stakeholders during the remote audit. This approach provides a comprehensive understanding of the stakeholder engagement process and the effectiveness of mitigation measures. Conclusion: The assessment team concludes that the risk associated with stakeholder mitigation measures is low. This conclusion is based on the information gathered through interviews with PD representatives and local stakeholders during the remote audit. Further details and analysis of stakeholder engagement and mitigation measures are provided in sections 3.7.1 and 3.7.2 of this report.
7.	No Double Counting	Low risk	Audit Technique: Desk review & interviews Appropriateness of Audit Technique: The audit technique involved a desk review of the declaration on the Project Developer's letterhead, affirming that there is no double counting. This was supplemented

			by interviews with PD representatives during the remote audit to further confirm the claim. Conclusion: The assessment team concludes that the risk of double counting is low. This conclusion is based on the confirmation obtained from the PD representatives during the remote audit. Further details are provided in Section 3 of this report.
8.	Actual operation of the plant	Low risk	Audit Technique: Desk review & interviews Appropriateness of Audit Technique: The audit technique involved a desk review of the State Energy Account (SEA) approved by a government entity (GETCL), as well as invoices raised by the Project Developer. Additionally, breakdown records were cross-checked, and the SCADA system (Supervisory Control and Data Acquisition) has been remotely verified across all three project sites during the audit. Interviews with the PD further confirmed the same. Conclusion: The assessment team confirms that the project activity has been implemented and is operational during the current monitoring period. This conclusion is based on the review of the SEA /24/, breakdown records /37/, and the remote interviews /31/ with PD representatives. Furthermore, the SCADA system has been remotely inspected at all three project sites, providing confirmation of the plant's operational status.

Personnel responsible for monitoring of project activity, data collection, management, and QA/QC procedure have been also interviewed. Following tables outline the personnel involved in the interviews, along with their respective roles. The interviews specifically targeted individuals responsible for monitoring of project activity, data collection, quality assurance and quality control (QA/QC) procedures.

The topics covered during interview ranges from general features and implementation of project to technical details of the project like calibration, monitoring and measuring system, data collection, recording, emergency procedures, Procedures for handling non-conformances with the validated monitoring plan, personal training, and archiving procedures. The assessment, based on the feedback

received during remote interview coupled with the documentation in VKU.F64W. Field Assessment Checklist for remote audit /32/.

Interview

Date of Remote Inspection: 12/07/2024			
Name	Role	Location of Site	Activity Performed during Remote Audit
Barun Kumar	Team Leader cum Technical Expert (TA 1.2)	Project is located at 3 sites in the state of Gujrat, India. Site 1: Village - Babsar, Tal - Vadali, Dist. – Sabarkantha, Site 2: Village - Bhordu, Tal - Tharad, Dist.- Banaskantha Site 3 - Village - Bilvaniya, Vantda Suka, Tal– Dhansura, Dist. -Aravalli	• An assessment of the implementation and operation of the GS4GG project activity as per the PDD • A review of information flows for generating, aggregating and reporting of the monitoring parameters. • Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the Monitoring Plan • A cross-check between information provided in the MR and data from other sources • A check of the monitoring equipment including calibration performance, and observations of monitoring practices against the requirements of the PDD and the applied methodology • A review of calculations and assumptions made in determining the GHG data and ERs, and • An identification of QA/QC procedures in place to prevent, or identify and correct, any errors or omissions in the reported monitoring parameters

The tables serve to identify the individuals interviewed and provide relevant information regarding their roles within the project. During remote audit, local stakeholders involved in the projects /31/ have been also interviewed to verify implementation of grievance mechanism and process of its resolution, as mentioned in the Monitoring report. It also included confirmation of sustainable development claims and verification of the socio-economic impact made by the project on the local community.

VKU also checked records and observed that the PD has provided opportunities for the locals to express their opinions and grievances. Project developer has put efforts to resolve issues through effective communication & consultation with stakeholders. VKU could verify & confirm all the above statements via focussed group discussions and personnel interview/31/ with stakeholders. VVB has included the gender information of stakeholders included as per the requirements of 9.7.2 (e) of GS4GG as tabulated below:

Personnel Interview

S.NO	INTERVIEWEE		DATES	SUBJECT
	Name & gender	Affiliation		
1	Abhishek Mondal (Male)	Infinite Environmental Solutions Pvt. Ltd. (Senior Analyst)	12/07/2024	- An assessment of the implementation and operation of the GS4GG project activity as per the PDD - A review of information flows for generating, aggregating and reporting of the monitoring parameters. - Interviews with relevant personnel to confirm that the operational and data collection procedures are implemented in accordance with the Monitoring Plan. - A cross-check between information provided in the MR and data from other sources - A check of the monitoring equipment including calibration
2	Haresh Kumar Patel (Male)	35 MW Juniper green sigma Pvt. Ltd. (Dy Manager)		
3	Sandeep Gohil (Male)	45 MW Juniper green sigma Pvt. Ltd. (Assistant Manager)		
4	Ashish Patel (Male)	40 MW Juniper green sigma Pvt. Ltd. (Assistant Manager)		

				performance, and observations of monitoring practices against the requirements of the PDD and the applied methodology. • A review of calculations and assumptions made in determining the GHG data and ERs. • An identification of QA/QC procedures in place to prevent, or identify and correct, any errors or omissions in the reported monitoring parameters.
--	--	--	--	--

Local Stakeholders / Non -Technical Personnels

S.NO.	NAME	GENDER	CATEGORY	DATES	LOCATION	SUBJECT
1.	Mahendra Sinh Chauhan	Male	Villager	12/07/2024	Babsar	Execution of project activity and its impact on the economic, social and environmental parameters on the local people of the area & around the situated project activity. The ongoing communication procedure and the address of their grievance followed proponent Scope by and the generation of employment in the
2	Mustak Shekh	Male	Villager		Babsar	
3	Naresh Pagi	Male	Office boy		Khadol, Bilvaniya	
4	Kishan Thakor	Male	Villager		Khadol, Bilvaniya	
5	Narshi Makvana	Male	Labour		Bhordu	

6	Dinesh Goswami	Male	Villager		Bhordu	locality due to the implementation of said project activity in the area. The ongoing trainings provided to the local employment.
---	----------------	------	----------	--	--------	--

The project developer adheres with no discrimination policy. But due to the remoteness of site females do not prefer to work here. Female employees are employed in the head office and it has been confirmed via interviews conducted during the remote audit /31/. Additionally, it is further confirmed via desk review of the "No Discrimination Policy"/38/ the Project Developer affirms its commitment to gender equality through a "No Discrimination Policy," which fosters an inclusive and respectful environment. This policy strictly rejects any form of discrimination or violence based on race, caste, sex, place of birth, religion, gender identity, sexual orientation, disability, or any other characteristic. It aligns with the foundational principles of equality enshrined in Articles 14, 15, 16, 17, and 18 of the Constitution of India. Additionally, the PD ensures that its commitment to non-discrimination is upheld consistently across all areas of influence and project activities.

VKU's Assessment Team has recorded attendance of all personnel interviewed & present during opening and closing meeting in a form VKU.F46W (Attendance Sheet for onsite audit) /33/ & same is kept as evidence of the remote audit. Stakeholder consultation interview has been also conducted by asking the site personnel to arrange some local stakeholders for maintaining the impartiality. During the interaction with them details about the impact of plant activities on their lives have been collected & no negative comments have been received during the interviews/31/ which were conducted remotely.

Verification Team confirms that there is no perceived or potential conflict of interest and has provided complete list of the people interviewed during remote site visit, including information on the organization they represent are disclosed in public document by their consent. Verification Team also confirms that prior consent has been taken from each individual interviewed as per the GS4GG requirements regarding recording and using their names and interviews for the reporting purposes.

2.3 Reporting of Findings

The objective of this step is to identify, discuss and conclude on the issues related to the monitoring, implementation and operations of the registered project activity that could impair the capacity of the registered project activity to achieve emission reductions or influence the monitoring and reporting of emission reductions. This is done based on the desk review and remote assessment. The verification team prepares and/or updates a verification protocol (internal document) that records the conformities and non-conformities, which may be of following types;

CAR (Corrective Action Request) is raised if one of the following occurs:

- Non-compliance with the monitoring plan, the methodology or the standardized baseline are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;

- Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;
- Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
- Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.

Clarification request (CL) is raised if information is insufficient or not clear enough to determine whether the applicable GS4GG requirements have been met. All CARs and CLs raised by the VKU Certification during verification shall be resolved prior to submitting a request for issuance.

FAR (Forward Action Request) is raised during verification if the monitoring and reporting require attention and/or adjustment for the next verification period.

In summary, 02 CAR, 03 CLs were raised during this verification which were closed successfully, and 01 FAR has been raised during the current monitoring period and the details are provided under section 6 of this report.

All the findings that are raised and communicated to project representative during verification are included under Section 6 of this report. The section also includes the response, provided, by the project participants and an assessment by the verification team if it was closed out or otherwise.

2.4 Technical Review

A draft verification report that is prepared by verification team is reviewed by an independent technical review team (one or more members) to confirm if the internal procedures established and implemented by VKU Certification were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the GS4GG rules and 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.

During the technical review process additional findings may be identified or the closed-out findings may be opened, which needs to be satisfactorily resolved before the request for issuance is submitted to GS4GG. The independent technical reviewer may either approve the report as such or reject/return the same in such case providing the comments/findings/issues that needs to be resolved by the verification team. The decision taken by the Technical Reviewer is final and is authorized by the Managing Director on behalf of VKU Certification Private Limited.

3. VERIFICATION FINDINGS

This section summarises the findings from the verification of the emission reductions reported for the 120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat for the monitoring period 01/01/2024 – 30/06/2024 (both dates included).

The project has applied for registration under the Gold Standard (GS) exclusively with ID:7572. This sole registration status has been confirmed by surfing the Gold Standard registry's website. Same sort of comprehensive search has been conducted across the websites of several registries like CDM (Clean Development Mechanism), VCS (Verified Carbon Standard), GCC (Global Carbon Council) and UCR (Universal Carbon Registry) etc, using matching project field, scope, titles and capacity, as well as by searching the details of Project Proponent. This rigorous surfing through various registries did not yield any instances of the project being registered under/ rejected by any of the aforementioned registries or any comparable mechanisms verification through Declaration:

The Project Developer (PD) has also confirmed this claim of single-registration through a declaration document submitted to the assessment team, affirming that the GHG emission reductions achieved by the project during the current monitoring period are not be sought or claimed under any other registries apart from GS.

Cross-Verification of GHG Benefits:

An independent search has been also conducted to ascertain whether the project had been registered or claimed for other GHG-related benefits, such as Renewable Energy Certificates (RECs) and International Renewable Energy Certificates (I-RECs). The assessment conducted thoroughly in the mentioned manner, coupled with the declaration submitted by the PD, affirms that there is no double counting of GHG benefits arising from this project activity.

The project's non-rejection status by other GHG programs has also been confirmed through a meticulous assessment. A declaration /35/ submitted by the PD claiming the same has been duly verified and found to be accurate by the verification team. Additionally, an independent verification process has been initiated with other relevant registries, which substantiated that there were no instances of project rejection by these entities.

In conclusion, the project's exclusive registration under GS for the current monitoring period, along with its absence from rejection lists of other GHG programs, has been comprehensively verified, ensuring the integrity and credibility of its GHG benefits claims. Details of the registries checked are as follows:

- <http://cdm.unfccc.int/>
- Verra Search Page
- I-REC Standard - The International REC Standard Foundation (irecstandard.org)
- <https://cri.nccf.in/>
- International Carbon Registry - International Carbon Registry
- GCC PROJECTS PORTAL (globalcarboncouncil.com)
- <https://biocarbonregistry.com/en/projects/>
- https://wilder.earth/social_carbon

- <https://www.ucarbonregistry.io/>
- <https://www.ecoregistry.io/>
- <https://www.carbonregistry.com/explore/projects>
- https://wilder.earth/social_carbon
- <https://www.recregistryindia.nic.in/>
- <https://www.ecoregistry.io/>

Further, verification team also confirms that this project doesn't falls under any NDC regulations as per the independent assessment of website climate action tracker-India.

3.1 Description of project

3.1.1 General description of project

Verification Means	During desk review and remote inspection, the Assessment Team verified MR version 1 dated: 08/07/2024, MR version 2 dated: 21/08/2024 MR version 03 dated 27/09/2024, Version 04 dated 11/11/2024 and final MR version 05 dated 17/12/2024 /14/and ER sheet version 1 dated 08/07/2024, ER sheet version 2 dated 21/08/2024 and final version 3 dated 17/12/2024 /15/, PDD version 6 dated: 11/01/2021/13/, and supporting documents /16/ /27/.
Findings	01 CL has been raised and further closed successfully
Conclusions	Verification is done in accordance with the registered PDD. General description of the project has been verified via Commissioning certificates, PPA provided by PD. Since all data has been verified thoroughly, the Assessment Team can ascertain that the description of the project mentioned is in line with GS4GG standards Version 1.0 and Principle and Requirements v1.2.

3.1.2 Location of Project

Verification Means	During desk review and remote Inspection, the Assessment Team verified MR version 1 dated: 08/07/2024, MR version 2 dated: 21/08/2024, MR version 03 dated 27/09/2024, Version 04 dated 11/11/2024 and final MR version 05 dated 17/12/2024 and ER sheet version 1 dated 08/07/2024 , ER sheet version 2 dated 21/08/2024 and final version 3 dated 17/12/2024 /15/, PDD version 6 dated: 11/01/2021/13/, and google each pro /30/ and interviews during remote audit /31/.
Findings	No findings have been raised
Conclusions	Verification is done following the registered monitoring plan and

	has been verified using Google earth during desk review. Since, 100% data is verified, the assessment team can ascertain that the location of project mentioned is correct and in compliance.
--	---

3.1.3 Reference of applied methodology

Verification Means	During desk review and remote inspection, the Assessment Team verified MR version 1 dated: 08/07/2024, MR version 2 dated: 21/08/2024, MR version 03 dated 27/09/2024 Version 04 dated 11/11/2024 and final MR version 05 dated 17/12/2024 /14/and ER sheet version 1 dated 08/07/2024 , ER sheet version 2 dated 21/08/2024 and final version 3 dated 17/12/2024 /15/, PDD version 6 dated: 11/01/2021/13/, and other supporting documents /12//18/
Findings	No finding has been raised
Conclusions	Verification is done following the registered PDD and applied methodology ACM0002 Version 20.0 as this is a large-scale solar project. Since data mentioned in MR has been verified thoroughly via registered PDD, the assessment team can ascertain that the description of the methodology used in the project mentioned is in line with GS4GG standards.

3.1.4 Crediting period of Project

Verification Means	During desk review and remote inspection, the Assessment Team verified MR version 1 dated: 08/07/2024 , MR version 2 dated: 21/08/2024 , MR version 03 dated 27/09/2024 Version 04 dated 11/11/2024 and final MR version 05 dated 17/12/2024 /14/ and ER sheet version 1 dated 08/07/2024, ER sheet version 2 dated 21/08/2024 and final version 3 dated 17/12/2024 /15/, PDD version 6 dated: 11/01/2021/13/, and other supporting documents /19//20/
Findings	No finding has been raised
Conclusions	Verification Team assessed that this is the 1 st crediting period of the given project activity i.e., from 09/11/2020 to 08/11/2025 (Length of 5 years and renewable). This has been verified via registered PDD and GS impact registry. Based on this, it is concluded that crediting period start date and its length is correct and is in line with GS4GG VVS/5/, GS4GG principles and requirements /1/.

3.2 Remaining Issues (FAR(s) from validation or previous verification)

This is seventh verification of the project activity. There are no FAR(s) from previous verification as per the last verification report version 02 dated 31/05/2023 /20/ that need to be closed during this verification.

3.3 Post registration changes

Type of change(s)	Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline
Description of change(s)	NA
Assessment of change(s)	NA
Opinion on change(s)	NA

Type of change(s)	Corrections																								
Description of change(s)	There are no changes in the current monitoring period. However, there was correction required in 5 th MP in estimated annual emission reductions as the degradation factor was neglected earlier. PD has already made changes and corrections in the previous monitoring period regarding the same.																								
Assessment of change(s)	There is no correction in current monitoring period however, there was one correction in 5th monitoring period. The correction is regarding the estimated value of Parameter EG_{facility,y}, y i.e. Quantity of net electricity supplied to the grid reported under SDG 7 in section B.7.1 of the registered GS PDD version 6.0 dated 11/01/2021 was mistakenly considered without using the degradation factor (0.70%). However, the baseline emission (BE_y) was calculated using the degradation factor, but the same has been reported erroneously (typographical error). The correct value of ER estimation can be referred from the ER sheet approved at the time of design certification. PD requested corrections during the previous MP to revise the estimated value Parameter EG_{facility,y}, y and parameter BE_y. The calculation table for the same has also been updated in line with the last verification report. Please note that the correction is only related to reporting the parameters in the PDD and it does not affect the additionality, applicability of methodology and registered monitoring plan of the project as the correct values were reported in the IRR and ER sheet at the time of Design Certification. SDG 7: Affordable and Clean Energy <table><tr><th>Year</th><th>Baseline Estimate (Mwh)</th><th>Project Estimate (Mwh)</th><th>Net Benefit (Mwh)</th></tr><tr><td>Year 1</td><td>0</td><td>298,120</td><td>298,120</td></tr><tr><td>Year 2</td><td>0</td><td>293,961</td><td>293,961</td></tr><tr><td>Year 3</td><td>0</td><td>291,903</td><td>291,903</td></tr><tr><td>Year 4</td><td>0</td><td>289,860</td><td>289,860</td></tr><tr><td>Year 5</td><td>0</td><td>287,831</td><td>287,831</td></tr></table>	Year	Baseline Estimate (Mwh)	Project Estimate (Mwh)	Net Benefit (Mwh)	Year 1	0	298,120	298,120	Year 2	0	293,961	293,961	Year 3	0	291,903	291,903	Year 4	0	289,860	289,860	Year 5	0	287,831	287,831
Year	Baseline Estimate (Mwh)	Project Estimate (Mwh)	Net Benefit (Mwh)																						
Year 1	0	298,120	298,120																						
Year 2	0	293,961	293,961																						
Year 3	0	291,903	291,903																						
Year 4	0	289,860	289,860																						
Year 5	0	287,831	287,831																						

	Total	0	1,461,675	1,461,675
	Total number of crediting years	5 Years		
	Annual average over the crediting period	0	292,335 (Mwh)	292,335 (Mwh)
	SDG 13: Climate Action			
	Year	Baseline Estimate (tCO ₂ e)	Project Estimate (tCO ₂ e)	Net Benefit (tCO ₂ e)
	Year 1	280,799	0	280,799
	Year 2	276,881	0	276,881
	Year 3	274,943	0	274,943
	Year 4	273,019	0	273,019
	Year 5	271,108	0	271,108
	Total	1,376,750	0	1,376,750
	Total number of crediting years	5 Years		
	Annual average over the crediting period	275,350 (tCO ₂ e)	0	275,350 (tCO ₂ e)
	The above stated corrections are assessed by VVB during the assessment stage and thus, it is to confirm that annual average values for estimation for both net electricity generation & emission reductions are now correctly used while calculating the emission reductions for the current monitoring. This has been verified via previous verification reports/20/ and registered PDD /13/ and is in line with GS4GG VVS/5/, GS4GG principles and requirements /1/.			
Opinion on change(s)	VVB's opinion is positive on the above correction by the PD and it is to confirm that the above stated correction will only result in the accurate estimation of emission reductions for a given time frame/current monitoring period and it doesn't affect the additionality and baseline scenario of the implemented project activity.			
Type of change(s)	Changes to the start date of the crediting period			
Description of change(s)	NA			
Assessment of change(s)	NA			
Opinion on change(s)	NA			
Type of change(s)	Permanent changes from the design Certified registered monitoring plan, applied monitoring methodology or standardized baseline			
Description of change(s)	NA			

Assessment of change(s)	NA
Opinion on change(s)	NA
Type of change(s)	Changes to the project design of approved project activity
Description of change(s)	NA
Assessment of change(s)	NA
Opinion on change(s)	NA

3.4 Description of monitoring system applied by the project

Project entails installation & operation of 120 MW (AC) grid connected solar photovoltaic power plant. The monitoring plan for this project activity has been crafted in alignment with the GS4GG guidelines and processes.

Commissioning dates for the project activity

S.No.	Location	Capacity (AC)	Date of Commissioning
1	Village Bilvaniya, Vantda Suka, Tal. - Dhansura, Dist.-Aravali	25 MW	17/10/2020
2	Village Babsar, Tal-Vadali, Dist. - Sabarkantha	25 MW	19/10/2020
3		10 MW	28/11/2020
4	Village Bilvaniya, Vantda Suka, Tal– Dhansura, Dist. - Aravalli	20 MW	28/11/2020
5	Village-Bhordu, Tal-Tharad, Dist.- Banas kantha	25 MW	09/12/2020
6		15 MW	17/12/2020

Technical Specifications

For Village Bilvaniya, Vantda Suka, Tal. - Dhansura, Dist.-Aravali

Capacity	25 MW (AC) / 36.247 MW (DC)
SPV Modules – Type/make	Monocrystalline / Trina Solar
No. of Photovoltaic Modules / Rating	72,492 / 405 Wp, 16,800 / 410 Wp
Inverters – Type/make	String/Sungrow
No. of Inverter / Rating	125 /200 KW
ABT Meter – Make / Serial No.	Secure / GJ-4608 - A
Name of Substation	66 kV GETCO Substation, Khadol

For Village Babsar, Tal-Vadali, Dist. -Sabarkantha

Capacity	25 MW (AC) / 36.41 MW (DC)
SPV Modules – Type/make	Monocrystalline / JA Solar & Trina Solar
No. of Photovoltaic Modules / Rating	52,192 / 405 Wp, 19,656 / 410 Wp & 3,640/ 405 Wp, 14,000 / 410 Wp
Inverters – Type/make	String/Sungrow
No. of Inverter / Rating	125 /200 KW
ABT Meter – Make / Serial No.	Secure / GJ-4585 - A
Name of Substation	66 kV GETCO Substation, Babsar

For Village Babsar, Tal-Vadali, Dist. -Sabarkantha

Capacity	10 MW (AC) / 14.696 MW (DC)
SPV Modules – Type/make	Mono PERC / JA Solar & Trina Solar
No. of Photovoltaic Modules / Rating	36,288 / 405 Wp
Inverters – Type/make	String/ Sungrow
No. of Inverter / Rating	50 /200 KW
ABT Meter – Make / Serial No.	Secure / GJ-4585 - A
Name of Substation	66 kV GETCO Substation, Babsar

For Village Bilvaniya, Vantda Suka, Tal–Dhansura, Dist. - Aravalli

Capacity	20 MW (AC) / 29.459 MW (DC)
SPV Modules – Type/make	Mono PERC / Trina Solar
No. of Photovoltaic Modules / Rating	50,064 / 405 Wp, 22,400 / 410 Wp

Inverters – Type/make	String/ Sungrow
No. of Inverter / Rating	100 /200 KW
ABT Meter – Make / Serial No.	Secure / GJ-4608 - A
Name of Substation	66 kV GETCO Substation, Khadol

For Village-Bhordu, Tal-Tharad, Dist.- Banas kantha

Capacity	25 MW (AC) / 36.541 MW (DC)
SPV Modules – Type/make	Mono PERC / JA Solar
No. of Photovoltaic Modules / Rating	71,092 / 405 Wp, 18,900 / 410 Wp
Inverters – Type/make	String/ Sungrow
No. of Inverter / Rating	125 /200 KW
ABT Meter – Make / Serial No.	Secure / GJ-4605 - A
Name of Substation	66 kV GETCO Substation, Bhordu

For Village-Bhordu, Tal-Tharad, Dist.- Banas kantha

Capacity	15 MW (AC) / 21.86 MW (DC)
SPV Modules – Type/make	Mono PERC / JA Solar
No. of Photovoltaic Modules / Rating	36,260 / 405 Wp, 17,500 / 410 Wp
Inverters – Type/make	String/ Sungrow
No. of Inverter / Rating	75 /200 KW
ABT Meter – Make / Serial No.	Secure / GJ-4605 - A
Name of Substation	66 kV GETCO Substation, Bhordu

The technical specifications outlined above have been confirmed through a remote audit, with supporting photographs submitted by the PD. This information has been verified as accurate and cross-checked with previously registered verification reports /20/.

The monitoring plan provides details about the organization responsible for monitoring, the parameters to be observed, the monitoring methods, quality assurance measures, quality control procedures, as well as how data will be stored and archived. The primary authority and accountability for tasks such as data registration, monitoring, measurement, reporting, and data review lies with the PD.

The authority and responsibility for registration, monitoring, measurement, reporting and reviewing of the data rests with the project participant. The monitoring team is composed the following staff:

Responsibilities of Site Incharge (PD): Overall functioning and maintenance of the project activity, the Site in-charge coordinates with the O&M operator as well as the site supervisors. Also, site in charge is responsible GHG emission calculation, Meter Calibration and Invoicing.

Responsibilities of O&M Representative (In house): Co-ordination between Site incharge of the O&M operator as well as the project participant and further report to PD head office.

Responsibilities of Site In-charge (O&M Operator): Responsibility for maintaining the data records, ensures completeness of data, and reliability of data (calibration of equipment) as well as data recording for all the parameters.

Responsibilities of Shift In-charge: Responsibility for day-to-day data collection and maintains day to day monitored data such as meter readings, Trainings etc.

Data archiving policy: All monitored data will be archived electronically for a period of two years after the end of the crediting period or the last issuance of VERs, whichever occurs later.

Data Measurement: The export and import energy is measured continuously using Main & Check meters installed at GETCO (Gujarat Energy transmission Corporation Ltd.) Sub-station located at following locations: -

Capacity (MW _{AC})	Substation	Location
45 MW	66kV Khadol S/s	Village - Gadh Akot, Bilyanthya and Vantda Suka, Tehsil – Dhansura, Dist.- Aravali
35 MW	66kV Babsar S/s	Village - Babsar, Tehsil – Vadali, Dist.- Sabar kantha
40 MW	66kV Bhordu S/s	Village - Bhordu, Tehsil – Tharad, Dist.- Banas kantha

Export & Import readings of Main & Check meters shall be taken on monthly basis by authorized officer of SEB (Gujarat Urja Vikas Nigam Limited) in the presence of PD or representative of PD. The calculations of net electricity supplied to grid is completely under purview of GUVNL (Gujarat Urja Vikas Nigam Limited) and Project owner do not have any control on it.

It is to be noted that though the PD or their representatives are available during meter reading, the calculations of net electricity supplied to grid is completely under purview of GUVNL (Gujarat Urja Vikas Nigam Limited) and PD does not have any control on it. PD gets the monthly credit report from where net electricity supplied to grid is obtained and used for emission reduction calculations.

Data collection and archiving:

Export & Import readings from main & check meter are collected under the supervision of the O & M Team or authorized representatives of PD. Export and Import data would be recorded and stored in electronic &/or Paper. The records are checked periodically by the Head (Operations) and discussed

thoroughly with the O & M Team. The period of storage of the monitored data will be 2 years after the end of crediting period or till the last issuance of GSVERs for the project activity whichever occurs later.

Mismatch in Monitoring Period and the Billing Period:

In case the dates of a particular monitoring period do not match with the dates of the billing period, the net electricity exported to the grid would be calculated from:

$$D = (A/B) * C$$

A = Difference of number of days which are not matching of billing period and monitoring period.

B = Number of days of the billing period/ month which was not matched with the monitoring period.

C = Net Electricity supplied to the grid for that given billing period/ month.

The calculated value after apportioning would be used for calculation of emission reductions during that period.

Emergency preparedness: The project activity does not result in any unidentified activity that can result in substantial emissions from the project activity. No need for emergency preparedness in data monitoring is visualized.

In the unlikely event of failure of Main meter and Check meter is found to be outside the acceptable limits of accuracy or faulty or not functioning properly, it will be repaired, recalibrated or replaced as soon as possible. In the event that the Main meter is not in service as a result of maintenance, repairs or testing, the Check meter will be used for readings and in the event that the Main meter and check meter both are not in service as a result of maintenance, repairs or testing, the Standby meter will be used for readings. During the monitoring period the main, check and standby meters were operating in the acceptable limits of accuracy at site.

The net electricity is calculated from the difference between export and import, which is used for baseline emission calculations, and the export and import readings are taken from the energy meters which are required to be calibrated as per the calibration frequency. If the calibration is delayed, the error factor will be applied as per the accuracy class of the energy meter for the delayed period at the time of verification.

Personnel training: In order to ensure a proper functioning of the project activity and a properly monitoring of emission reductions, the staffs are trained. The O&M team are trained in equipment operation, data recording, reports writing, operation and maintenance and emergency procedures in compliance with the monitoring plan.

During the current monitoring period PD conducted and inclusive training program of the site personnel at the site. Total number of Trainings given to the employees during current monitoring period of 6 months (182 days) are 15 Training. The PD submitted training records /21/ to the VVB which confirm the participation of employees in training programs arranged at the site. VVB also confirmed about the training programs during personnel interview and focussed group discussions /31/ during the remote audit. The list of trainings is provided below:

Details of training conducted during current Monitoring period

Site -1 45 MW solar plant located at Village - Gadh Akot, Bilyanthya and Vantda Suka, Tehsil – Dhansura, Dist.- Aravali		
Sno.	Date	Topic of training
1	23/01/2024	BBS Training
2	17/02/2024	Road Safety Training
3	02/03/2024	Tilting Activity, General Safety Training, ERT
4	03/04/2024	Electrical Safety Training
5	22/05/2024	General Safety Training, LSSR
Site -2 40 MW solar plant located at Village - Bhordu, Tehsil – Tharad, Dist.- Banas kantha		
1	24/01/2024	BBS Training
2	16/02/2024	Road Safety Training
3	07/03/2024	Tilting Activity, General Safety Training, ERT
4	05/04/2024	Electrical Safety Training
5	17/05/2024	General Safety Training, LSSR
Site -3: 35 MW solar plant located at Village - Babsar, Tehsil – Vadali, Dist.- Sabar kantha		
1	25/01/2024	BBS Training
2	16/02/2024	Road Safety Training
3	14/03/2024	Tilting Activity, General Safety Training, ERT
4	20/04/2024	Electrical Safety Training
5	15/05/2024	General Safety Training, LSSR

The monitoring plan for the project activity, including the data collection and archiving policy, data measurement, and emergency preparedness the aligns with the registered GS PDD dated 11/01/2021 version 6. Also, the O&M team has been trained properly. This adherence was confirmed during remote site visits through interviews with O&M staffs and relevant personnel and training records provided by PD /21/

3.4.1 Compliance of monitoring plan with monitoring methodology

The verification team has confirmed that the monitoring plan and implemented monitoring system comply with the applied monitoring methodology ACM0002, version 20.0 /12/. All other requirements of the applied methodology have been met.

During the verification process, all relevant monitoring parameters listed in the GS4GG PDD /13/ have been checked for appropriateness of the applied measurement/determination method, correctness of the values used for ER calculation, accuracy, and applied QA/QC measures for all the sites.

Based on our assessment, we find that the monitoring mechanism adheres to the methodology and is deemed effective and dependable. The monitoring plan specified in the GS4GG PDD aligns with the applied methodology, ACM0002 version 20.0, and conforms to the approved standardized baseline of the registered GS4GG project.

3.4.2 Compliance of monitoring activities with the registered Monitoring plan

3.4.2.1 Data and Parameters fixed ex-ante

4.2.1 Data and Parameters fixed ex-ante																	
Verification Means	During desk review and remote inspection, the Assessment Team verified MR version 1.0 dated: 08/07/2024, MR version 02 dated 21/07/2024, MR version 03 dated 27/09/2024, Version 04 dated 11/11/2024 and final MR version 05 dated 17/12/2024 /14/ and PDD version 6 dated: 11/01/2021/13/.																
Findings	No findings raised																
Conclusions	Details of ex-ante parameters <table><tr><th>Parameter</th><th>Unit</th><th>Description</th><th>Value</th></tr><tr><td>EF_{grid, OM, y}</td><td>tCO₂e/ MWh</td><td>Operating Margin CO₂emission factor in year y</td><td>0.9622</td></tr><tr><td>EF_{grid, BM, y}</td><td>tCO₂e/ MWh</td><td>Build Margin CO₂emission factor in year y</td><td>0.8811</td></tr><tr><td>EF_{grid, CM, y}</td><td>tCO₂e/ MWh</td><td>Combined Margin CO₂emission factor in year y</td><td>0.9419</td></tr></table> Verification is done in accordance with the registered PDD and applied methodology ACM0002 Version 20.0 /12/. The values are obtained from the “CO₂ Baseline Database for Indian Power Sector” /34/ for Indian Power Sector version 15, published by the Central Electricity Authority, Ministry of Power, Government of India as mentioned in MR /14/ and verified as per registered PDD /13/.	Parameter	Unit	Description	Value	EF _{grid, OM, y}	tCO ₂ e/ MWh	Operating Margin CO ₂ emission factor in year y	0.9622	EF _{grid, BM, y}	tCO ₂ e/ MWh	Build Margin CO ₂ emission factor in year y	0.8811	EF _{grid, CM, y}	tCO ₂ e/ MWh	Combined Margin CO ₂ emission factor in year y	0.9419
Parameter	Unit	Description	Value														
EF _{grid, OM, y}	tCO ₂ e/ MWh	Operating Margin CO ₂ emission factor in year y	0.9622														
EF _{grid, BM, y}	tCO ₂ e/ MWh	Build Margin CO ₂ emission factor in year y	0.8811														
EF _{grid, CM, y}	tCO ₂ e/ MWh	Combined Margin CO ₂ emission factor in year y	0.9419														

3.4.2.2 Data and Parameters monitored

Verification Means	During desk review and remote inspection, the Assessment Team verified MR version 1 dated: 08/07/2024 , MR version 2 dated: 21/08/2024, MR version 03 dated 27/09/2024, Version 04 dated 11/11/2024 and final MR version 05 dated 17/12/2024 /14/, ER sheet
---------------------------	---

	version 01 dated 08/07/2024 , version 02 dated 21/08/2024 and final version 3 dated 17/12/2024 and PDD version 6 dated: 11/01/2021/13/, and other supporting documents i.e. State energy accounts /24/, invoices /25/, training records /21/, Declaration regarding income generation/26/ and by Interviews during remote audit /31/.			
Findings	CL1 & CAR 4 was raised in this regard and was further closed successfully.			
Conclusions	Details of monitored parameter			
	Parameters	Source	Value Applied	Purpose of Data
	EGpj, y	Monthly state energy accounts, cross-verification with invoices raised.	160,978.41 MWh	Monitoring and data verification regarding implication of SDG 7.
	Air Quality	The baseline emissions are the product of electrical energy baseline EG PJ, y expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor. Calculated as per “Tool to calculate the emission factor for an electricity system,”. The data are obtained from “CO2 Baseline	151,625 tCO2e	Monitoring and data verification regarding implication of SDG 13.

		Database for Indian Power Sector” version 15.0, published by the Central Electricity Authority, Ministry of Power, Government of India.		
	Quantitative employment, Quality of Employment Income generation	Training Records (HSE & HR) Employment records of the employees.	23 people Employed ⁶ 15 trainings Income (INR) – 5,238,725 cumulative of the current monitoring period	Monitoring and data verification regarding implication of SDG 8.
SDG Indicator 7.2: Affordable and Clean Energy EG facility, y : Quantity of net electricity supplied by the project plant/unit to the grid in year y (MWh) Method: 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 SEB as per below equation: $EG\ facility,\ y = EGExport - EGImport$ The net energy exported to the grid is measured every month using a calibrated energy meter by the State Electricity Board authorities (in this case Gujrat Energy Transmission Corporation Limited) in the presence of the project implementer. The meter/s are jointly				

⁶ 4 employees are hired during current monitoring period

	inspected and sealed by authorized representatives of the company and the state utility The Energy meters used to record the values of export/import are of accuracy class 0.2s are used to measure the net electricity generated. The assessment Team remotely inspected the energy meters installed at site and verified the Serial numbers and confirmed the authenticity of the meter details. Hence, the value of 160,978.41 MWh, as specified in final MR version 05 and the emission reduction sheet, is verified as accurate and complies with the stipulations outlined in Para 36 of the "CDM validation and verification standard for project activities, Version 03.0." /36/. Additionally, the assessment team scrutinized the State Energy Accounts issued /24/ and also cross-checked the power exported values with the invoices raised by PD to GETCL and found them consistent with the state energy accounts issued. The meters are calibrated once in every three years and the calibration of the meters are verified from calibration certificates provided and is applicable for current monitoring period /28/. The calibration is done by State electricity board. Further calibration details are provided in section 3.4.3 of this report. During remote inspection of the site, the assessment team also interviewed the site in-charge, O&M personnel /26/, plant manager along with other technical and non-technical staff, and confirmed the calibration details, technical specifications /17/, O&M details, etc. It is to note that arrangement of meters, accuracy class of meters and calibration frequency is under the purview of state electricity boards in the project implemented area and PD has no control over meter calibration. PD is performing the O&M in house by a skilled team. Since 100% of the data has been verified, the assessment team assures that the values for the emission reductions calculated are accurate and verified as correct. Further calculation has been provided in section 3.5 of this report.
--	--

	SDG Indicator SDG 8.5.1: Decent Work and Economic Growth - Regarding quantitative employment and income generation, this involves tracking the number of project employees, their gender, employment type (permanent/temporary), age, disability status, and the salaries paid to them. - The parameter is determined by the total number of individuals employed directly as a result of the project's activities, and it takes into account the improved salary provided to these 1. Quantitative employment and income generation - This involves tracking the number of project employees, their gender, employment type (permanent/temporary), age, disability status, and the salaries paid to them. The parameter is determined by the total number of individuals employed directly as a result of the project's activities, and it takes into account the improved salary provided to these employees, as well as the employment records and declaration /26/ provided to assessment team by the PD In this specific case, the data reveals that there was a total of 23 employees (including 4 new hires) during this monitoring period. Further VVB has crosschecked the number of persons employed during remote visit by means of attendance register and interviews/31/ and employment records /22/. The Project thus provides employment opportunities and pays salaries and welfares and also helps to increase the income and living standards of the employees. 2. Quality of employment A total of 15 trainings of duration Max 5-6 hours have been provided during the current monitoring period (5 trainings at each site) and salary (INR) – 5,238,725 cumulative of the current monitoring period. The assessment team found this information acceptable and verified it via Training records, verified during remote audit provided by PD & Employee Records submitted. Details of training topics are mentioned in the section 3.4 of this report. SDG Indicator 13.2.1: Climate Action
--	--

	Air Quality: Reduction in CO₂ emission reduction due to implementation of project activity The baseline emissions are the product of electrical energy baseline EGPI_y expressed in MWh of electricity produced by the renewable generating unit multiplied by the emission factor. The calculation is clearly presented in the Emission Reduction Sheet, and it indicates that the emission reduction achieved during the current monitoring period is 151,625 tCO₂e. The assessment team has reviewed this information and confirmed its accuracy by verifying via state energy accounts/24/ and further cross verifying via invoices/25/. Consequently, the emission reduction calculation is considered correct and in compliance with the necessary standards. Additionally, employee interviews /31/ were conducted during remote audit as part of the verification procedure. Hence, the description for SDG 13.2.1 has been verified and aligns with the registered Project Design Document (PDD) version 6, confirming its acceptability. Since 100% data was verified, the assessment team can ascertain that the values for the SDG7, SDG 8 and SDG 13 are accurate
--	---

3.4.2.3 Implementation of Sampling Plan

This section is not applicable as no sampling is involved and 100% data is verified by VVB

Verification Means	N/A
Findings	N/A
Conclusions	N/A

3.4.3 Compliance with the calibration frequency requirements for measuring instruments

Verification Means	During desk review and remote inspection assessment team verified MR version 1 dated: 08/07/2024, MR version 2 dated: 21/08/2024, MR version 03 dated 27/09/2024, Version 04 dated 11/11/2024 and final MR version 05 dated 17/12/2024/14/, PDD version 6 dated: 11/01/2021/13/ and other supporting documents Calibration records /28/
Findings	CAR 04 was raised in this regard and same has been closed successfully
Conclusions	Verification is done in accordance with the registered monitoring plan (as per measurement methods and procedures) and applied methodology. The monitoring results are recorded consistently as per the approved frequency in the monitoring plan.

Calibration is done once in every three years as per CEA guidelines⁷ which is consistent with the registered PDD /13/ and PPA/27/.

Calibration frequency has been cross verified via calibration certificates and was found to be in line with the registered PDD /13/. Calibration is conducted by State Electricity Board and Calibration records are maintained at the plant. The meter is in control and supervision of e Gujarat Urja Vikas Nigam Limited (GUVNL).

The metering system comprises of main and check meter. In the event that the main metering system is not in service due to maintenance, repair or testing, the reading is obtained from the check meter. A standby meter is also present at sites to compensate any calculation loss due to any mishap with both the main and check meter. PD has provided calibration certificate and calibration dates mentioned in those are found to be correct. Record of the calibration are detailed below:-

Calibration Details of meters:

1. For 35 MW solar plant connected to Babsar Substation:

S.No.	Meter Number	Type	Make	Accuracy class	Date of calibration	Due date
1	GJ4583A	Main meter	Secure	0.2s	20/06/2023	19/06/2026
2	GJ4584A	Check meter	Secure		20/06/2023	19/06/2026
3	GJ4585A	Standby meter	Secure		20/06/2023	19/06/2026

2. For 40 MW solar plant connected to Bhordu Substation:

S.No.	Meter Number	Type	Make	Accuracy class	Date of calibration	Due date
1	GJ4603A	Main meter	Secure	0.2s	08/07/2023	07/07/2026
2	GJ4604A	Check meter	Secure	0.2s	08/07/2023	07/07/2026
3	GJ4605A	Standby meter	Secure	0.2s	08/07/2023	07/07/2026

3. For 45 MW solar plant connected to Khadol Substation:

S.No.	Meter Number	Type	Make	Accuracy class	Date of calibration	Due date
-------	--------------	------	------	----------------	---------------------	----------

⁷ https://cea.nic.in/old/reports2/regulation/CEA_metering_regulation_amendment_2019.pdf

	1	GJ4606A	Main meter	Secure	0.2s	08/08/2023	07/08/2026
	2	GJ4607A	Check meter	Secure	0.2s	08/08/2023	07/08/2026
	3	GJ4608A	Standby meter	Secure	0.2s	08/08/2023	07/08/2026

3.5 Assessment of data and calculation of emission reductions or net removals

3.5.1 Calculation of baseline values or estimation of baseline situation of each SDG Impact

Verification Means	During desk review and remote inspection assessment team verified MR version 1 dated: 08/07/2024 , MR version 2 dated: 21/08/2024 ,MR version 03 dated 27/09/2024,Version 04 dated 11/11/2024 and final MR version 05 dated 17/12/2024 /14/, ER sheet version 01 dated 08/07/2024 , version 02 dated 21/08/2024 and final version 3 dated 17/12/2024 and PDD version 6 dated: 11/01/2021/13/ and other supporting documents i.e. state energy accounts and invoices /24//25/.
Findings	No findings raised
Conclusions	Verification is done in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology /12/. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. SDG 13 Baseline emissions: It includes only CO2 emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology ACM0002 assumes that all project electricity generation above baseline levels would have been generated by existing grid-connected power plants and the addition of new grid-connected power plants. The baseline emissions are to be calculated as follows: $BE_y = EGP_{J,y} \times EF_{grid, CM, y}$ Where; BE_y = Baseline emissions in year y, (tCO₂e/yr)

	$EG_{PJ, y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the 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 Calculation of $EG_{PJ, y}$ The calculation of $EG_{PJ, y}$ is different for a) Greenfield plants, b) Retrofits and replacements, and c) Capacity additions The project activity is the installation of solar projects, and it is a greenfield project. So, the formula in option (a) i.e., greenfield plants are used to calculate the value of $EG_{PJ, y}$. In accordance with para 41 of the applied methodology: Where: $EG_{PJ, y} = EG_{facility, y}$ $EG_{PJ, y}$ = 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). $EG_{facility, y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr). $BE_y = EG_{PJ, y} * EF_{grid, CM, y}$ $BE_y = 160,978.41 * 0.9419$ $BE_y = 151,625 \text{ tCO}_2\text{e (Rounded down)}$ SDG 7: The monitoring parameter for the SDG 7 is Quantity of net electricity supplied to the grid during the year y. Since baseline and pre-project scenario are same, in the baseline condition no renewable electricity will be supplied to grid from the project location. Hence, the baseline value is zero. SDG 8
--	--

	The monitoring parameter for the SDG 8 are Number of trainings provided to employees & O&M staff, Income generation & Number of O&M staffs involved in the project. Since baseline and pre-project scenario are same, in the baseline condition these values are zero.								
	Thus, the estimated baseline situation of each SDG outcomes is summarised as follows:								
	<table><tr><th>SDGs</th><th>Baseline value</th></tr><tr><td>SDG 7: Affordable and Clean Energy</td><td>No Activities in the baseline</td></tr><tr><td>SDG 8: Decent Work and Economic Growth</td><td>No Activities in the baseline</td></tr><tr><td>SDG 13: Climate Action</td><td>Emission of 151,625 tCO₂e</td></tr></table>	SDGs	Baseline value	SDG 7: Affordable and Clean Energy	No Activities in the baseline	SDG 8: Decent Work and Economic Growth	No Activities in the baseline	SDG 13: Climate Action	Emission of 151,625 tCO ₂ e
	SDGs	Baseline value							
	SDG 7: Affordable and Clean Energy	No Activities in the baseline							
SDG 8: Decent Work and Economic Growth	No Activities in the baseline								
SDG 13: Climate Action	Emission of 151,625 tCO ₂ e								
The Data given in the MR /14/ section E.1 and ER sheet has been verified via Registered PDD /13/ during desk review and is found to be correct and in compliance with ISO 14064-2 clause 6.4 and 6.5.									

3.5.2 Calculation of project value or estimation of project situation of each SDG Impact

Verification Means	During desk review and remote inspection assessment team verified MR version 1 dated: 08/07/2024, MR version 2 dated: 21/08/2024, MR version 03 dated 27/09/2024, Version 04 dated 11/11/2024 and final MR version 05 dated 17/12/2024/14/, ER sheet version 1 dated 08/07/2024, version 02 dated 21/08/2024 and final version 3 dated 17/12/2024 and PDD version 6 dated: 11/01/2021/13/ and other supporting documents Training records/21/, state energy accounts, invoices /24//25/
Findings	CL1 & CAR 4 has been raised in this regard and successfully closed
Conclusions	Verification is done in accordance with the registered monitoring plan (as per measurement methods and procedures to be applied) and applied methodology /12/, state energy accounts and invoices. The monitoring results were recorded consistently as per the approved frequency in the monitoring plan. SDG 13 & SDG 7 - Project emissions

	As per para 31 of section 5.4 of the approved consolidated Methodology ACM0002 (Version 20.0): “For most renewable energy power generation project activities, $PE_y = 0$. However, some project activities may involve project emissions that can be significant. These emissions shall be accounted as project emissions by using the following equation: $PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y}$ Where: PE_y - Project emissions in year y (tCO₂e/year) $PE_{FF,y}$ - Project emissions from fossil fuel consumption in year y (tCO₂/year) $PE_{GP,y}$ - Project emissions from the operation of dry, flash steam or binary geothermal power plants in year y (t CO₂e/ year) $PE_{HP,y}$ - Project emissions from water reservoirs of hydro power plants in year y (tCO₂e/ year) ” As the project activity is the installation of a new grid-connected Solar power plant/unit and 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. Therefore $PE_{FF,y}$, $PE_{GP,y}$, $PE_{HP,y}$ is equal to zero and thus, $PE_y = 0$ tCO₂e. Leakage emission As per para 53 of section 5.6 of the approved consolidated Methodology ACM0002 (Version 20.0): No leakage emissions are considered in the project activity. The main emissions potentially giving rise to leakage in the context of electric sector projects are emissions arising due to activities such as power plant construction and upstream emissions from fossil fuel use (e.g., extraction, processing, and transport). Since the emissions sources are small, it is neglected, thus, $LE_y = 0$ tCO₂e. The baseline emissions are the product of electrical energy baseline $EG_{PJ,y}$ expressed in MWh of electricity produced by the renewable generating unit multiplied by an emission factor. These are calculated as follows $BE_y = EG_{PJ,y} * EF_{grid, CM, y} = 151,625 \text{ tCO}_2\text{e.}$ <table border="1" data-bbox="544 1794 1394 1951"> <tr> <th colspan="2">Estimated Emission Reduction as in GS PD for the equivalent period of the current Monitoring period, 01/01/2024 – 30/06/2024 (both dates included):</th></tr> <tr> <td>Monitoring Period Start Date</td><td>01/01/2024</td></tr> </table>	Estimated Emission Reduction as in GS PD for the equivalent period of the current Monitoring period, 01/01/2024 – 30/06/2024 (both dates included):		Monitoring Period Start Date	01/01/2024
Estimated Emission Reduction as in GS PD for the equivalent period of the current Monitoring period, 01/01/2024 – 30/06/2024 (both dates included):					
Monitoring Period Start Date	01/01/2024				

	Monitoring Period End Date	30/06/2024
	Days in Current Monitoring period	182 days
	Annual Emission reductions as per GS PDD	275,350 tCO ₂ e
	Estimated Emission Reduction as per PDD for the equivalent period of the current Monitoring period	= (Annual Estimated GHG emission reductions as per revised GS PD/Total days in a year) *days in current monitoring period = (275,350 * 182 (days)/365) = 137,297 (round down) (tCO ₂ e)
	Actual Emission Reduction as per MR and ER during current Monitoring period	151,625 tCO ₂ e
	Percent difference	10.44 %

The net electricity of 160,978.41 Mwh has been generated by the project activity and evacuated to the grid, during the current monitoring period, which resulted in total emission reductions of 151,625 tCO₂e as per the total installed capacity 120 MW. which is about 10.44 % higher than estimated emission reductions as per PDD which is 137,297 tCO₂e for the current monitoring period. However, this increase is due to higher yields and more sunshine hours in most of the months. Since energy generation is influenced by climate conditions, which are beyond the Project Developer's control, the difference is due to natural variations in solar radiation in the monitoring period. However, this higher value does not impact the additionality of the project.

As per GS4GG registered PDD, the PLF chosen is for the lifetime of the project activity has been provided below:

PLF as per registered PDD (%)	Actual PLF (%)	Percent variation in PLF	Breaching value of PLF as per registered PDD	Benchmark as per registered PDD
28.36 %	30.71 %	8.29 %	22.30 %	14.17 %

The estimated PLF as per PDD is 28.36 % and the actual PLF achieved during monitoring period is 30.71 % i.e increase of +8.29 % variation in PLF. VVB has followed section 2.1.1/2.1.2 of “ Assessment Approach for reporting Higher EX-Post emission Reductions” dated 04/07/2022 for it’s assessment of PLF- a important variable which can cause material impact on the sensivity analysis in the investment analysis. In the current monitoring period the increase of 8.29% in PLF falls within the range of +/- 10% applied for sensitivity analysis. This is in Line with 2.1.3 (a) of above mentioned approach which states that if variable value is in range of +/-10%, no further assessment is needed, hence VVB concludes that change in variable value is in expected range of variation & thus Monitored and verified emission reductions of 1,51,625tCO₂ stands confirmed. Calculations for the same are already shown in ER sheet “PLF Analysis” . How ever a FAR-01 is included in PDD for future investigation. Project activity still continues to remain under the breaching value and breach mark as per section B.5 of registered PDD /13/. Additionally, for the complete year (01/07/2023 to 30/06/2024), the actual PLF is 27.58% which is 2.83% lesser as compared with PLF in registered PDD. Assessment team has verified the same and found acceptable.

There are no major breakdowns occurred in current monitoring period which is confirmed as per the interviews conducted during remote audit. Moreover, the total maintenance and downtime for the current monitoring period is mentioned below.

For 45 MW solar plant connected to Bhordu Substation

Date	B/d Description	Start time	Stop time	Total down time Hrs.
09/01/2024	Grid BD from GSS	12:07	12:23	0:16
14/03/2024	Grid BD from GSS	8:05	8:25	0:20
14/05/2024	Grid BD from GSS	9:28	16:54	7:26
22/05/2024	Grid BD from GSS	11:46	13:13	1:27
19/06/2024	Grid BD from GSS	9:45	10:17	0:32
19/06/2024	Grid BD from GSS	10:59	11:05	0:06
Total	-	-	-	10:07:00

For 40 MW solar plant connected to Babsar Substation:

Date	B/d Description	Start time	Stop time	Total down time Hrs.
03/01/2024	Grid BD from GSS	12:28	12:40	0:12

	27/01/2024	Grid BD from GSS	10:45	10:59	0:14
	04/02/2024	Grid BD from GSS	11:11	11:52	0:41
	05/03/2024	Grid BD from GSS	11:42	12:00	0:18
	20/04/2024	Grid BD from GSS	6:22	11:35	5:13
	13/05/2024	Grid BD from GSS	15:23	16:00	0:37
	18/05/2024	Grid BD from GSS	6:28	9:03	2:35
	Total	-	-	-	9:50:00
For 35 MW solar plant connected to Khadol Substation					
	Date	B/d Description	Start time	Stop time	Total down time Hrs.
	12/04/2024	Grid BD from GSS	06:32	09:58	3:26
	12/04/2024	Grid BD from GSS	17:19	17:52	0:33
	08/05/2024	Grid BD from GSS	08:21	08:48	0:27
	16/05/2024	Grid BD from GSS	15:34	15:45	0:11
	Total	-	-	-	04:37:00
Breakdown Calculation					
Average total Operational hours ⁸ =13 Hrs *182 days i.e. 2,366 Hrs					
Total breakdown hours = 24:34:00 hrs					
= (24:34:00 hrs /2,366 hrs) * 100					
= 1.02 %					

⁸ Average operational hours for current monitoring period have been verified via interviews with operation team during the remote audit and also crosschecked with the website <https://www.timeanddate.com/>

	The project activity is under operation for a total 2,366 hours during the current monitoring period. The total maintenance and downtime for the current monitoring period is 24:34:00 hours (1.02%) for this project activity and it is beyond the control of PD. Therefore, due to this minor percentage variations of maintenance and downtime identified in the current monitoring period; it doesn't impact on the GHG emission reductions. These shutdown details in the current monitoring period have been described in appendix 3 of MR/14/. It is important to note that the plant was not entirely shut down during these hours; only grid breakdown from GSS has occurred. This has been assessed by assessment team during remote audit with the help of interviews of site personnels. By checking the records remotely and desk review of the final MR version 03 /14/ and breakdown sheet /37/ submitted by PD for current monitoring period. Moreover, there is no unforeseen incident which can affect the applicability of the methodology and thus the same is acceptable to the assessment team. PP has provided all the necessary data such as state energy accounts /24/ & Invoices/25/, meter calibration details/28/ to VKU for the current monitoring period, ensuring a comprehensive and accurate assessment. The values of the parameter "Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh)", which were used in deriving the greenhouse gas (GHG) emission reduction, have been found to be well correlated between the data sets and the ER calculation spreadsheet/15/ provided by PD. Hence, the VKU Assessment Team can confidently assert that the calculation method and formulas applied for determining the baseline emissions adhere to the applied methodology, specifically ACM0002 version 20.0 /12/. The default values, emission factors, and assumptions employed in the calculations are all deemed reasonable and justified. SDG 8: Total number of people employed: 23 (including 4 new hires during the current monitoring period). Trainings provided in current monitoring period: 15 Nos. Income generated: ₹5,238,725 for the current monitoring period (total income for skilled employees) Hence, it is confirmed that, the employment data and income generation figures were verified through employment records/22/, as well as
--	--

	declarations from the PD/26/. Training records provided by the PD were used to verify the number of trainings conducted during current monitoring period. Since 100% data has been verified, the assessment team can ascertain that the values for the emission reductions calculated are accurate and in line with ISO 14064- 2 clause 6.7 /9/.
--	--

3.5.3 Calculation of Leakage

Verification Means	During desk review and remote inspection assessment team verified MR version 1 dated: 08/07/2024 , MR version 2 dated: 21/08/2024 MR version 03 dated 27/09/2024 ,version 04 dated 11/11/2024 and final MR version 05 dated 17/12/2024 /14/, PDD version 6 dated: 11/01/2021/13/ and applied methodology/ 12/
Findings	No findings raised
Conclusions	Verification is done in accordance with the registered PDD /13/ and applied methodology ACM0002 Version 20.0 /12/. Leakage (LEy) = 0 As per Paragraph 53 of the consolidated methodology ACM0002 Version 20 /12/, there is no leakage emission considered through the renewable project electricity generation.

3.5.4 Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

SDG and SDG Impact	Baseline Estimate	Project Estimate	Net Benefit	Conclusion
7- Affordable and Clean	0	160,978.41 MWh	160,978.41 MWh	Assessment team verified Net Electricity generated in the current monitoring period via state energy accounts (SEA) /24/ that were further crosschecked via invoices /25/. DGRs were also checked

				remotely during the remote audit. Hence it is confirmed that, all the above stated documents are found correct.
8- Decent Work and Economic Growth	0	Total 23 people employed (including 4 new hires during current monitoring period) 15 training conducted Income (INR) – 5,238,725 cumulative of the current monitoring period	Total people Employed: 23 Training Conducted: 15 Income (INR) – 5,238,725 cumulative of the current monitoring period.	Assessment team verified total employment generated and trainings conducted in the current monitoring period via employment records, /22/ of employees and training records /21/ and were found to be correct and consistent as reported in MR final version 05.
13- Climate Action	151,625 tCO ₂ e	0	151,625 tCO ₂ e	Assessment team conducted desk review and a remote inspection and verified the data reported in the ER sheet /15/ and MR /14/ for current monitoring period via State energy accounts /24/ and invoices /25/ raised monthly and found it to be correct.

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

SDG and SDG Impact	Values estimated in ex ante calculation of approved PDD	Actual values achieved during this monitoring period	Conclusion

7- Affordable and Clean	145,767.04 MWh	160,978.41 MWh	Assessment team conducted desk review and remote inspection and verified the Net Electricity generation reported in the ER sheet/15/ and MR /14/ for current monitoring period via state energy accounts /24/ and invoices /25/ raised monthly. Total employment generated and trainings conducted in the current monitoring period were verified via employment records /22/ of employees and training records /21/ and were found to be correct.
8- Decent Work and Economic Growth	1 Trainings- minimum 15 employees	15 Trainings 23 employees Income (INR) – 5,238,725 cumulative of the current monitoring period	
13- Climate Action	137,297 tCO ₂	151,625 tCO ₂ e	

3.5.6 Remarks on difference from estimate value in registered PDD

Verification Means	During Desk Review and remote inspection assessment team verified MR version 1 dated: 08/07/2024 , MR version 2 dated: 21/08/2024, MR version 03 dated 27/09/2024, version 04 dated 11/11/2024 and final MR version 05 dated 17/12/2024 /14/ , PDD Version 06 dated 11/01/2021, and other supporting documents					
Findings	No findings raised					
Conclusion	The ex-ante estimates value of the emission reductions for the monitoring period as per the registered PDD /13/, are 137,297 tCO ₂ e and the actual emission reductions achieved for the monitoring period are 151,625 tCO ₂ e. The table below defines the estimated and achieved values of the parameters					
	SDG Indicator	SDG	Values Estimated Annually	Values Estimated for current MP	Values achieved for Current MP	Unit
	Affordable and Clean Energy	SDG 7	292,335	145,767.04	160,978.41	MWh
	Decent Work and Economic	SDG 8	15	15	23 (including 4 new hires in current MP)	Number of employees

	Growth		1	1	15	Number of Trainings
	Climate Action	SDG 13	275,350	137,297	151,625	tCO2e per annum
For SDG 13, Since actual emission reductions for current monitoring period is higher than the estimated value as per the PDD by 10.44 %. The reductions in actual emission reductions are justified, since during the current monitoring period most of the months have higher yield months and higher sunshine hours. The generation is subject to climate conditions which are beyond the control of the Project Developer. However, this higher value does not impact the additionality of the project. Thus, VKU is of opinion that the facts stated by PD is correct and calculations for ER is done correctly in line with applied methodology. All the data have been made available to the assessment team by PD during remote audit /29/ and as supporting evidences which have been monitored as per required monitoring frequency. The means of verification for the values of parameters, used for baseline emission calculation, is described above. The assessment team has checked and confirmed the emission reduction calculations in the spreadsheet and found to be accurate. The monitoring report /14/ is supported by emission reduction spreadsheet /15/. The consistency and formula were verified and found to be accurate. VKU is of the opinion that this method of calculation of emission reductions is accurate and results in conservative estimation of emission reduction and is in line with the applicable GS requirements set out in section 12.13 clause 12.13.2 of GS Standard version 01 and that the verification of the GHG statement was conducted in accordance with ISO 14064-3; 2019 /9/.						

3.6 Safeguards Reporting

As per the safeguarding Principles Assessment in Section B.7 of the GS4GG PDD, there is one safeguarding principles for which mitigation measures added to monitoring plan. Assessment of the compliance of the safeguarding principles for current monitoring period was done as per the registered PDD /13/ and found accurate. This is as follows.

Principles	Mitigation Measures added to the Monitoring Plan	Verification Assessment
Principle 4.3.5 Hazardous and Non-hazardous Waste	The waste will be disposed to the waste handlers and the firm comply with all the local laws for monitoring and disposal.	The waste is disposed to the waste handlers and the firm comply with all the local laws for monitoring and disposal. However, during the remote interviews with site personnel it is confirmed that, that the Solar PV based power generation project does not involved any Hazardous or Non-Hazardous waste generation in current monitoring period. Also, it has been verified that, PD complies with the local rules as, PD has provided a valid Agreement with “Electro alloys recycling & Transformation Hub” which is an authorized vendor⁹ as per the authorisation issued by SPCBs/PCCs under E-Waste (Management) Rules, 2026 for disposal of the E-waste.

The Assessment Team confirms that the project representative has submitted all the necessary evidence to verify the safeguarding principles outlined in the monitoring plan. The team concluded that the information provided meets the requirements of the Template Guide - MR v1.1 and complies with the GS4GG Safeguarding Principles Requirement v2.1, dated 29/06/2023 /3/.

3.7 Stakeholder inputs and legal disputes

3.7.1 List all Inputs and Grievances which have been received via the Continuous Input and Grievance Mechanism together with their respective responses/mitigations.

During desk review, Assessment team checked the procedures mentioned in MR and during remote inspection cross verified the same via interviews of site personnel and stakeholders /31/.

As a part of continual improvement process- PD has kept grievance register /23/ at the project site which is accessible to stakeholders to provide their feedback on the project. It is placed appropriately at a publicly accessible location (at main gate of each site) where local stakeholders can provide their feedback. This

⁹ https://www.ndmc.gov.in/pdf/cpcb_approved_list_of_e-waste_recyclers_dismantler.pdf

location is also conducive to continuous and regular checks for stakeholder comments. The grievance register is being continuously monitored and addressed through the grievances cell on regular basis.

In the current monitoring period, no grievances have been received and this was verified during remote inspection /29/ of all the three sites via grievance register /23/ placed on site.

3.7.2 Report on any stakeholder mitigations that were agreed to be monitored.

During remote inspection Assessment Team verified grievance register /26/ placed at all the sites and conducted personnel interviews /31/ and concluded that there was no negative feedback logged during the current monitoring period. The stakeholders interviewed are listed in section 2.2 of this report.

3.7.3 Details of legal contest that has arisen with the project during the monitoring period

Assessment Team confirms that the given GS4GG project “120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat ” is in compliance with the Host Country “India” legal environmental, ecological and social regulations as per requirements mentioned in section 7.11 at time of validation for design certification for standalone project activity of validation and verification standard v1.0 /5/ and there is no legal challenge that has arisen claiming a project is not in compliance with regulation, during certification process. Assessment team visited the website “Indiankanoon” and “livelaw” searching for any legal dispute regarding this project activity and found no such case against them.

3.8 Quality of evidence to determine emission reductions

As per the verification of ER calculation process, assessment team confirmed that all the parameters required for determination of emission reductions has been included in the final Monitoring report version 05 dated 17/12/2024 /14/ and final ER sheet version 02 dated 21/10/2024 /15/ and are consistent with the applied methodology ACM0002 Version 20.0 /12/ and the monitoring plan contained in the registered PDD /13/. The parameters used are completely monitored as per the registered PDD /13/ in this monitoring period.

During desk review and remote inspection, assessment team verified the reported ERs with the help of supporting documents e.g., SEA, Invoices, DGR and conducted personnel interviews to check sufficiency of data and its aggregation.

No significant, lack of evidence and missing data were detected during verification. Hence, the verification team confirms that the monitoring plan ensures required management of the monitoring system to ensure the quality of the monitored data. All internal data are subjected to QA/QC measures. The verification process for the same has been clearly described in above section of the report.

Emission reductions is calculated by the “Quantity of net electricity supplied from the project (solar) plant/unit to the grid in year y”, EG pj, y (MWh) (SDG Indicator 7). This parameter is monitored through the reading of Energy meters installed. The meters have accuracy of class 0.2s.

The electricity generated was checked via SEAs /24/ and were crosschecked with records of electricity sale (e.g., sales receipt/Invoices) /25/. Calibration of all the meters undertaken once in every three years as per PPA. remote personnel interview /31/ with the site personnel of the project activity confirms that the necessary QA/QC procedures are in place. Data management system is effective and reliable for the

net electricity supplied by the project plant/unit to the grid in year y. Hence, assessment can conclude that the data and its management is in compliance with GS4GG validation/ verification standard /5/.

3.9 Management system and quality assurance

The final verification report passed a technical review and completeness check/ Quality check before being submitted to the client for forward submission to GS. A technical reviewer qualified in accordance with VKU certification competency form which VKU.F8A. Competency Evaluation of Personnel (Internal Document) for validation and verification of GHG projects performed the technical review. The comments raised during the technical review stage is thoroughly addressed by the assessment team. After the comments raised during this stage is successfully addressed, the Final verification report undergo VKU's Completeness/Quality Check before issuance.

3.10 Verification Assessment

All the data have been made available to the assessment team by PD during remote audit /29/ and as supporting evidences during verification assessment which have been monitored as per required monitoring frequency. The means of verification for the values of parameters, used for baseline emission calculation, is described above in the report.

The verification team attests to correctness of the formulas and methodologies used to compute baseline emissions as per GS4GG Validation and Verification Standard V1.0 /5/. Applied default values, emission factors, and assumptions in the calculations are all reasonable. Verification team attests to the correctness of formulas and methodologies used in calculation of baseline emissions, assumptions, emission factors and default values applied in the calculations are justified.

SDG Indicators during this monitoring period 01/01/2024 – 30/06/2024 is:

SDG 13- Actual emission reduction achieved is 151,625 tCO₂e calculated by multiplying the unit of MWh produced by an emission factor. The value of emission factor is verified from the PDD /13/ and is calculated as per “Tool to calculate the emission factor for an electricity system Tool 7: version 7,”. The data is obtained from “CO₂ Baseline Database for Indian Power Sector” for Indian Power Sector” version 15.0, /35/ published by the Central Electricity Authority, Ministry of Power, Government of India /34/.

SDG 7- Amount of net electricity generated is 160,978.41 MWh. Value calculated was verified via SEAs /24/ and was further cross verified by Invoices /25/.

SDG 8- Employment generated- 23 (including 4 new hires in current monitoring period) verified via employment records and 15 trainings conducted have been verified via training records provided by PDD /13/.

The verification consisted of the following phases:

- **Document Review:** Relevant documents, such as the verification report, monitoring plan, methodology, GS PDD, QA/QC procedures and supporting documents were thoroughly reviewed.
- **Remote Assessment:** This included crosschecking of data, personnel interviews and evaluation of the

actual project scenario.

- **Resolution of Discrepancies:** Any non-conformities identified during the assessment were addressed and resolved.

In this monitoring period, **CAR: Corrective Action Request :02, CL: Clarification Request :03** were raised and resolved. Also, **01 FAR** has been raised during current monitoring period i.e As per section 2.1.3 b and 2.1.4 of “RC_2022 assessment approach for reporting higher ex post emission reductions”, For future investigations, the emission reductions shall be capped to the upper bound of the sensitivity analysis range for the monitoring period. The remaining emission reductions that are over and above the upper bound of the sensitivity range may be claimed by the project developer during the next issuance if the change in variable value was found to be temporary.

Description of the findings raised is provided in Section 6 of this verification report.

3.11 Verification Opinion

VKU Certification, contracted by Infinite Environmental solutions Limited (Project Representative) and Juniper Green Sigma Private Limited (Project Developer), has performed the independent verification of the emission reductions for the GS Project ID GS7572 “120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat” for the monitoring period 01/01/2024 to 30/06/2024 as reported in the Monitoring Report, Version 05 dated 17/12/2024. Juniper Green Sigma Private Limited is responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the project activity. VKU commenced the verification against the baseline and monitoring methodology ACM0002: Grid-connected electricity generation from renewable sources - Version 20.0 the monitoring plan contained in the PDD Version 06 dated 11/01/2021, and Monitoring Report Version 05 dated 17/12/2024.

VKU Certification confirms that the monitoring system is in place and the emission reductions are calculated without material misstatements. This verification report has been prepared using the latest available template specified by GS4GG registry and complies with the instructions to follow as per GS4GG principle and requirements v1.2 and GS4GG validation and verification standard v1.0 /5/.

The verification activities were conducted in accordance with VKU Certification’s Quality Manual System and VKU Certification’s SOP 4 and as per the GS4GG validation and verification standard v1.0 /5/. As a result, it is concluded that the emission reductions from the GS Project Activity ID 7572 “120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat” are correctly reported in the Monitoring Report Version 05 dated 17/12/2024 /14/ and corresponding ER sheet /15/ for the monitoring period 01/01/2024 to 30/06/2024 (both dates included) amounted to 151,625 tCO₂e.

VVB opinion on issuance as per the ISO 14064-3, clause 9 which is compliance with GS4GG principles and requirement v1.2 and GS4GG validation and verification standard v1.0.

VVB Opinion	Conclusion
Positive	☒ (Mark Tick if applicable)
Negative	☐ (Mark Tick if applicable)

4. REFERENCE/DOCUMENTS USED IN THE VERIFICATION

S.NO	AUTHOR	TITLE	REFERENCE TO THE DOCUMENT	PROVIDER
1.	Gold Standard	Principles and Requirements	Version 1.2 and Dated: 23/10/2019	Gold Standard Website
2.	Gold Standard	Stakeholder consultation and engagement requirements	Version 2.1 and Dated: 14/06/2022	Gold Standard Website
3.	Gold Standard	Safeguarding principles & requirements	Version 2.1 and Dated: 29/06/2023	Gold Standard Website
4.	Gold Standard	Design change requirements	Version 1.1 and Dated: 14/04/2023	Gold Standard Website
5.	Gold Standard	Validation and verification standard	Version 1.0 and Dated: 06/03/2023	Gold Standard Website
6.	Gold Standard	Site visit and remote audit requirements and procedures	Version 2.0 and Dated: 30/05/2023	Gold Standard Website
7.	Gold Standard	Validation & verification body requirements	Version 2.0 and Dated: 14/01/2021	Gold Standard Website
8.	Gold Standard	Community services activity requirements	Version 2.0 and Dated: 14/01/2021	Gold Standard Website
9.	Gold Standard	Renewable energy activity requirements	Dated: 04-2019 Dated- 31/05/2019	ISO Website
10.	Gold Standard	Land-use & forests activity requirements	Version 1.4 and Dated: 16/08/2021	Gold Standard Website
11.	Gold Standard	Gold standard eligible impact quantification methodologies	Version 2.4 and Dated: 22/06/2023	Gold Standard Website
12.	UNFCCC CDM	<u>Methodology- ACM0002 “Grid-connected electricity generation from renewable sources</u>	Version 20.0 and Dated: 28/11/2019	CDM Website
13.	Infinite Environmental Solutions Limited	GS4GG PDD	Version 06 and Dated 11/01/2021	Gold Standard Website
14.	Infinite Environmental	Monitoring Report	Version 01 and Dated 08/07/2024	Infinite Environmental

	Solutions Limited		Version 02 and Dated 21/08/2024 Version 03 and Dated 27/09/2024 Version 04 and Dated 11/11/2024 Version 05 and Dated 17/11/2024	Solutions Limited
15.	Infinite Environmental Solutions Limited	ER Sheet	Version 01 and Dated 08/07/2024 Version 02 and Dated 21/08/2024 Version 03 and Dated 17/12/2024	Infinite Environmental Solutions Limited
16.	Juniper Green Sigma Private Limited	Commissioning certificates	Dated: 17/10/2020, 19/10/2020, 28/11/2020, 09/12/2020 and 17/12/2020	Infinite Environmental Solutions Limited
17.	Juniper Green Sigma Private Limited	Technical specifications	N/A	Infinite Environmental Solutions Limited
18.	UNFCCC CDM	Tool 7 to calculate the emission factor for an electricity system- V 07 Tool 1 for the demonstration and assessment of additionality V 07	Version 07	CDM Website
19.	LGAI Technological Center, S. A	Design Certification (Validation) Report	Version 02 and Dated 11/09/2020	Gold Standard Website
20.	VKU Certifications Pvt. Ltd.	Registered previous Verification report	Version 02 and Dated 21/06/2024	Gold Standard Website
21.	Juniper Green Sigma Private Limited	Training Records applicable for current monitoring period from 01-January-2024 to 30-June-2024	N/A	Infinite Environmental Solutions Limited
22.	Juniper Green Sigma Private Limited	Employment records of personnels applicable for the current monitoring period	N/A	Infinite Environmental Solutions

				Limited
23.	Juniper Green Sigma Private Limited	Grievance Register Photograph	N/A	Infinite Environmental Solutions Limited
24.	GUVNL	State Energy Accounts of current monitoring period	N/A	Infinite Environmental Solutions Limited
25.	Juniper Green Sigma Private Limited	Invoices of current monitoring period	N/A	Infinite Environmental Solutions Limited
26.	Juniper Green Sigma Private Limited	Declaration regarding O&M and income generation	N/A	Infinite Environmental Solutions Limited
27.	Govt. Entity	Power Purchase Agreement	Dated: 21/05/2019	Infinite Environmental Solutions Limited
28.	Govt. Entity	Calibration Certificates of energy meters installed at all three sites	Dated: 20/06/2023 and 08/07/2023	Infinite Environmental Solutions Limited
29.	VKU Certification	Remote Inspection Screenshots	Dated: 12/07/2024	N/A
30.	N/A	Google Earth Pro Software	N/A	N/A
31.	VKU Certification	Remote interviews of Site Personnel and Stakeholders	Dated: 12/07/2024	N/A
32.	VKU Certification	VKU.F62W.Field Assessment Checklist	Dated: 12/07/2024	N/A
33.	VKU Certification	VKU.F46W. Attendance Sheet	Dated: 12/07/2024	N/A
34.	Central Electricity Authority	CO2 Baseline Database for Indian Power Sector	Version 15	Central Electricity Authority website
35.	Juniper Green Sigma Private Limited	Self- declaration for no double counting	Dated - 06/08/2024	Infinite Environmental Solutions Limited
36.	UNFCCC CDM	CDM validation and verification	Version 3.0	CDM Website

		standard for project activities	Dated- 09/09/2021	
37.	Juniper Green Sigma Private Limited	Breakdown details for current monitoring period	N/A	Infinite Environmental Solutions Limited
38.	Juniper Green Energy	No Discrimination policy	Adopted on 16/July/2019	Infinite Environmental Solutions Limited

5. Certification Statement

VKU Certification Private Limited (VKU Certification), contracted by Infinite Environmental solutions Limited (Project Representative) and Juniper Green Sigma Private Limited (Project Developer), has performed the independent verification of the emission reductions for the GS4GG project activity 7572 “120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat ”in India for the monitoring period 01/01/2024 – 30/06/2024 as reported in the Monitoring Report (public) Version 05 dated 17/12/2024. The Infinite Environmental Solutions Limited is responsible for the collection of data in accordance with the monitoring plan and the reporting of GHG emissions reductions from the project activity.

It is our responsibility to express an independent verification statement on the reported GHG emission reductions from the project activity

VKU Certification commenced the verification on the basis of the baseline and monitoring methodology ACM0002 V 20.0 /12/, the monitoring plan contained in the PDD Version 06 dated 11/01/2021/13/, Monitoring Report Version 05 dated 17/12/2024 as per the methodology described under Section 2 of this report.

VKU Certification’s verification approach is based on the understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these. VKU Certification planned and performed the verification by obtaining evidence and other information and explanations that VKU Certification considered necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

In our opinion the GHG emissions reductions reported for the project activity for the period 01/01/2024 – 30/06/2024 are fairly stated in the Monitoring Report (final) Version 05 dated 17/12/2024. The GHG emission reductions were calculated correctly on the basis of the approved baseline and monitoring methodology ACM0002 V 20.0 /12/ and the monitoring plan contained in the PDD Version 06 dated 11/01/2021 /13/.

VKU Certification Private Limited is able to certify that the emission reductions from the GS4GG project activity 7572 “120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat” in India during the period 01/01/2024 – 30/06/2024 (including both days) amount to 151,625 tCO₂e.

Verified and certified emission reductions as per commitment period:



Commitment period	Amount
From 01/01/2024 to 30/06/2024 (including both days)	151,625 tCO ₂ e

Dr Vikas Kumar Aharwal
Founder and Director
VKU Certification Private Limited

18/12/2024
Indore, India

6. VERIFICATION FINDINGS (CAR/CL/FAR)

Corrective Action Request – 02

Clarification Request –03

Forward Action Request – 01

Finding No. 1		Date: 19-07-2024
Finding Type- CAR ☐ CL ☒ FAR ☐		
Stage of finding raised: Desk Review ☒ On-site/remote/hybrid assessment ☒ Technical Review ☐ Project Review Report by Registry ☐		
Requirement		
Clause 3.1.1, 6.1.1, of GS4GG Principles and requirements Version 1.2		
Non-Conformity		
Supporting data/evidences regarding the implementation, monitoring plan and Sustainable development Goals are not provided to VVB.		
Evidence		
1. PD has not provided the evidences/records for the current monitoring period regarding the trainings, electricity generation, Commissioning, no double counting, grievance mechanism, technical specifications, ownership of the project, breakdown details and Achieved SDGs as per the implementation of PDD and monitoring plan. 2. PD has not provided evidences regarding the start date of project activity as per section B of MR. 3. Evidences for “no discrimination are not provided” as per section D.2 of MR. 4. As per section E.5.1 (SDG-8) of provided MR, the clarification on the calculation of income generation of 5,548,601 INR is not provided.		
1st Response from PD		Date: 21/08/2024
1. The evidences for the current monitoring period regarding the trainings, electricity generation, commissioning, no double accounting, technical specifications, grievance register, ownership of the project, breakdown details and all the achieved SDGs as per the registered PDD and monitoring plan has been provided. 2. The start date of the project activity is consistent with the registered PDD version 06 and the supporting provided along with responses. 3. The evidences regarding no discrimination policy as per section D.2 of monitoring report. 4. As per section E.5.1 (SDG 8) of monitoring report, the amount mentioned is the total income generation for all the employees working in the current monitoring period and it has been revised as per the actual scenario and the supporting regarding the same has been submitted along with the responses.		

Documents provided by PD for review	
1. Training records 2. JMR and invoices 3. Commissioning certificate 4. Declaration regarding no double accounting 5. Technical specifications 6. Grievance register 7. Ownership of the project 8. Breakdown details 9. Supporting documents regarding SDGs 10. Registered PDD version 06 11. No discrimination policy 12. Declaration of income generation 13. Revised MR version 2.0 14. Revised ER sheet version 2.0	
1st Review by Assessment Team	Date: 24-09-2024
1. The supporting evidence and records for the current monitoring period, covering aspects i.e training, electricity generation, commissioning, double counting prevention, grievance mechanisms, technical specifications, project ownership, breakdown details, and achieved SDGs in accordance with the PDD and monitoring plan, have been provided by the Project Developer (PD). These records have been reviewed and verified, and they are confirmed to be accurate. PD has submitted the SEA and invoices, and the revised ER sheet v2.0 has been verified via submitted SEA and invoices for the current monitoring period. The values in ER sheet have been found to be correct. # CLOSED 2. The start date of the project activity aligns with the PDD, and the PD has provided supporting evidence to substantiate this. The provided evidence has been verified and confirmed to be consistent, and thus, it is accepted. # CLOSED 3. PD has provided evidence demonstrating compliance with the principle of "no discrimination." This evidence has been verified by the assessment team and is accepted. # CLOSED 4. PD has revised the total income generation to 5,238,725 INR for the current monitoring period. This figure reflects the income generated for all employees during this period. Supporting evidence for this calculation has been provided and reviewed, and thus, the revised total is accepted. #CLOSED	

Finding No. 2	Date: 19-07-2024
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of finding raised :	
Desk Review	☒
On-site/remote/hybrid assessment	☒
Technical Review	☐
Project Review Report by Registry	☐
Requirement	

Clause 6.1.1 and Clause 4 of GS4GG Principles and requirements version 1.2 and GS4GG Safeguarding principles and Requirement version 2.1	
Non-Conformity	
Supporting evidences regarding the Safeguarding principle 4.3.5 are not provided to VVB.	
Evidence	
As per section F & D.2 of the provided MR, PD has not submitted the evidences/records regarding the Safeguarding principle 4.3.5 i.e. monitoring and disposal of hazardous and non-hazardous waste.	
1st Response from PD	Date: 21/08/2024
As per section F & D.2 of the monitoring report, PD has submitted the evidences regarding the safeguarding principles 4.3.5 i.e., monitoring and disposal of hazardous and non-hazardous waste.	
Documents provided by PD for review	
1. Document regarding hazardous and non-hazardous waste management.	
1st Review by Assessment Team	Date: 24/09/2024
PD has provided the supporting evidences regarding waste management which has been verified and found to be in compliance with the local laws and safeguarding principle, hence accepted #CLOSED	

Finding No. 3	Date: 26-09-2024
Finding Type- CAR ☐ CL ☒ FAR ☐	
Stage of finding raised:	
Desk Review	☐
On-site/remote/hybrid assessment	☐
Technical Review	☒
Project Review Report by Registry	☐
Requirement	
Principle 3 (Section 4.1.36) of Principle and Requirements Version 1.2 Section G of GS4GG Template guide -Monitoring report V.1.1	
Non-Conformity	
- There are three locations in the project. How one grievance register is able to cater to all three sites? - Grievance mechanism of the project activity is not clarified in the MR.	
Evidence	

Section G of MR V02 have been identified with non-conformance	
1st Response from PD	Date: 27/09/2024
- As there are three locations in the project so the grievance register has been placed at the main gate for each site and the same has been mentioned in the revised MR. Also, the supporting documents for the same has been provided. - The grievance mechanism of the project activity has been mentioned in the revised MR.	
Documents provided by PD for review	
Revised MR version 03 Grievance registers for each site	
1st Review by Assessment Team	Date: 03-10-2024
- PD has clarified that, the grievance register has been placed at the main gate for each site and same has been mentioned in section G of the revised MR version 03, hence accepted - Grievance mechanism of the project activity has been mentioned in section G of MR which is verified as correct and hence it is accepted	

Finding No. 4	Date: 26-09-2024
Finding Type- CAR ☒	CL ☐ FAR ☐
Stage of finding raised:	
Desk Review	☐
On-site/remote/hybrid assessment	☐
Technical Review	☒
Project Review Report by Registry	☐
Requirement	
Clause 6.1.1 (d) of Principle and Requirements Version 1.2	
Non-Conformity	
- Standby meters have not been depicted in the SLD and there is no mention of standby meters in QA/QC procedures pertaining to the monitored parameters. - Calibration frequency of meters is inconsistent in MR - Sum of breakdown hours is incorrect as per the breakdown spreadsheet. - Inconsistent statements in case of calculated parameter "Air quality".	
Evidence	
The following sections have been identified with non-conformance - Section D.2 & Section C of MR V02 - Section C - appendix 3 - D.2	

1st Response from PD	Date: 27/09/2024
- Standby meters have been added in the SLD and the same has been mentioned in the QA/QC procedure and has been made consistent throughout the revised monitoring report. - The calibration frequency has been revised and made in line with the registered PDD and made consistent throughout the revised MR. - The sum of breakdown hours has been revised and made consistent with the supporting breakdown details provided. - The statements have been revised of calculated parameter “Air quality” as per the actual scenario and is as per the registered PD.	
Documents provided by PD for review	
Revised MR version 03	
1st Review by Assessment Team	Date: 03-10-2024
PD has updated the SLD to include standby meters in Section C of MR Version 03. Additionally, the mention of standby meters in the QA/QC procedures related to the monitored parameters has also been revised. Therefore, this update is accepted.#CLOSED	

Finding No. 5	Date: 26-09-2024
Finding Type- CAR ☒	CL ☐ FAR ☐
Stage of finding raised:	
Desk Review	☐
On-site/remote/hybrid assessment	☐
Technical Review	☒
Project Review Report by Registry	☐
Requirement	
Safeguarding Principles and requirement version 2.1 dated 29/06/2023	
Non-Conformity	
The principle number of safeguarding principle is not as per the Safeguarding Principles and requirement version 2.1 dated 29/06/2023	
Evidence	
Section D.2 & F of MR V02 are identified with non-conformance	

1st Response from PD	Date: 27/09/2024
P.9.5 is the latest safeguarding principle number for hazardous and non-hazardous waste as per GS4GG core document safeguarding principles and requirements version 2.1. but this was not available at the time of registration. Hence, the mentioned safeguarding principal number i.e., 4.3.5 is as per the registered PDD version 06 and applicable for the current monitoring period.	
Documents provided by PD for review	
Revised MR version 03	
1st Review by Assessment Team	Date: 03-10-2024
Safeguarding principles and requirements Version 2.1 were not available at the time of registration. The assessment team has confirmed that safeguarding principle number 4.3.5 corresponds with the registered PDD Version 06. Hence, it is deemed correct and accepted.	

Finding No. 6	Date: 15-11-2024
Finding Type- CAR ☐	CL ☐ FAR ☒
Stage of finding raised:	
Desk Review	☐
On-site/remote/hybrid assessment	☐
Technical Review	☐
Project Review Report by Registry	☒
Requirement	
Results from GS4GG performance review Section 2.1.3 and 2.1.4 of RC_2022 assessment approach for reporting higher ex post emission reductions	
Non-Conformity	
In all instances of monitoring VVB to check for Higher EX-Post Emission Reductions in line with section 2.1.3 and 2.1.4 of “RC_2022(Assessment Approach For Reporting Higher Ex-Post Emission Reductions” dated 04/07/2022.	
Evidence	
NA	
1st Response from PD	Date: NA
NA	
Documents provided by PD for review	
NA	

Declaration

All CARs, CLs, and FARs from the Verification

Total Number of CAR s	02	Total Number of CLs s	03	Total Number of FAR s	01
Status of CARs	☐ Open ☒ Closed ☐ Turned to a FAR	Status of CARs	☐ Open ☒ Closed ☐ Turned to a FAR	Status of CARs	☒ Open ☐ Closed ☐ Turned to a FAR

7. COMPETENCE OF VERIFICATION TEAM AND TECHNICAL REVIEWERS

Team Leader (TA 1.2) -Barun Kumar



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Barun Kumar
Nationality	Indian
Countries of Experience	India, South Africa, Kenya, Uganda, DR Congo, Zambia, Madagascar, Fiji, Egypt, Singapore
Educational Qualification	B.Sc. (Environmental Science and Water Management) M.Sc. (Ecology & Environmental Sciences)
Year of Experience	13 Years +
Area of Expertise	Climate Change & Environment
Eligible Sectoral Scope	SS 1 – TA 1.2 - Renewables SS 3 – TA 3.1 – Energy Demand SS 6 – TA 6.1 – Construction SS 7 – TA 7.1 – Transport SS 13 – TA 13.1 – Solid waste and wastewater SS 14 – TA 14.1 – Forestry He is a GS Approved Auditor

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	YES
Local Expert (India)	YES
TA Expert (1.2, 3.1, 6.1, 7.1, 13.1, 14.1)	YES
Financial Expert	NO

Reviewed by	Apoorva Gupta (Quality Manager)	Date	12/09/2024
Approved by	Dr. Vikas Kumar Aharwal (Founder & Director)	Date	12/09/2024

Validator/verifier-Trainee -Sanjana Bhana



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Sanjana Bhana
Nationality	Indian
Countries of Experience	India
Education Qualification	M.Sc. (Environmental Sciences) B.Sc. (Life Sciences, Biotechnology, Chemistry)
Year of Experience	2.5 Years
Area of Expertise	Climate Change &Environment / Industry
Eligible Sectoral Scope	NA

Roles

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

Reviewed by	Apoorva Gupta (Quality Manager)	Date	06/05/2024
Approved by	Barun Kumar (Technical Manager)	Date	06/05/2024

History of the Document

Version	Date	Amendment Summary*	Prepared By	Approved By
1.2	29/11/2022	Inclusion of Project Trainee, Validator/Verifier Trainee and Local Expert (Country Wise) in roles Table.	Vandana Gupta	Dr. Vikas Kumar Aharwal
1.1	22/07/2021	NA	Ayushi Garg	Vikas Aharwal
1.0	27/03/2020	NA	Ayushi Garg	NA

*Amendment Summary adopted in VKU System on 12.10.2022

Technical Reviewer (TA 1.2)-Sunil Kathuria



Certification Pvt. Ltd.

VKU.F50W. Competence Statement

COMPETENCE STATEMENT

Name	Sunil Kathuria
Nationality	Indian
Countries of Experience	Malaysia, Uganda, Kenya, South Africa, Nigeria, Bangladesh, China, Vietnam, Thailand, Philippines, United Kingdom, Germany, USA
Educational Qualification	B.E. (Electrical Power)
Year of Experience	40 Years
Area of Expertise	Climate Change & Environment
Eligible Sectoral Scope	SS 1 – TA 1.1 – Thermal energy generation SS 1 – TA 1.2 – Renewables SS 2 – TA 2.1 - Energy distribution SS 3 – TA 3.1 - Energy Demand SS 4 – TA 4.1 – Cement and lime production (Manufacturing Industries) SS 13 – TA 13.1 Solid Waste & Wastewater He is a GS Approved Auditor

Roles

Project Trainee	NO
Validator/Verifier Trainee	NO
Validator	YES
Verifier	YES
Team Leader	YES
Technical Reviewer	YES
Local Expert (India)	YES
TA Expert (1.1, 1.2, 2.1, 3.1, 4.1, 13.1)	YES
Financial Expert	NO

Reviewed by	Apoorva Gupta (Quality Manager)	Date	12/09/2024
Approved by	Barun Kumar (Technical Manager)	Date	12/09/2024

History of the Document

Version	Date	Amendment Summary*	Prepared By	Approved By
1.3	30/07/2024	Inclusion of Filling guideline for eligible sectoral scope and other editorial changes	Apoorva Gupta	Dr. Vikas Kumar Aharwal
1.2	29/11/2022	Inclusion of Project Trainee, Validator/Verifier Trainee and Local Expert (Country Wise) in roles Table.	Vandana Gupta	Dr. Vikas Kumar Aharwal
1.1	22/07/2021	NA	Ayushi Garg	Vikas Aharwal
1.0	27/03/2020	NA	Ayushi Garg	NA

* Amendment Summary adopted in VKU System on 12.10.2022

History of the Document

Version	Date	Amendment Summary*	Prepared By	Approved By
3.1	14.09.2024	Duplicacy of executive summary and table is removed from section 1	Apoorva Gupta	Dr. Vikas Kumar Aharwal
3.0	21/05/2024	Signature of TR added as approver	Apoorva Gupta	Dr. Vikas Kumar Aharwal
2.1	23/04/2024	Change in VKU address at front page	Apoorva Gupta	Dr. Vikas Kumar Aharwal
2.0	28/08/2023	Revisions done in all sections as per the requirement of GS4GG Standard	Vandana Gupta	Dr. Vikas Kumar Aharwal
1.1	22/07/2021	NA	Ayushi Garg	Vikas Aharwal
1.0	17/03/2020	NA	Ayushi Garg	NA

*Amendment Summary adopted in VKU System on 12.10.2022