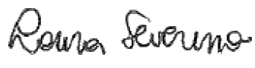




Verification and certification report form for GS project activities

VERIFICATION AND CERTIFICATION REPORT

Title of the project activity	120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. In Gujarat
GS Reference number of the project activity	7572
Version number of the verification and certification report	1.3Aa
Completion date of the verification and certification report	06/08/2025
Monitoring period number and duration of this monitoring period	8 th Monitoring period 01/07/2024 to 31/12/2024 (Inclusive of both the dates)
Version number of monitoring report to which this report applies	06
Crediting period of the project activity corresponding to this monitoring period	09/11/2020 to 08/11/2025 (Inclusive of both the dates)
Project developer(s)	Juniper Green Sigma Private Limited Infinite Environmental Solutions Limited
Host Party	India
Sectoral scope (s), selected methodology (ies)	Sectoral scope 1 ACM0002, version 20.0
Estimated GHG emission reductions or net anthropogenic GHG removals for this monitoring period in the registered PDD	138,806 tCO ₂
Certified GHG emission reductions or net anthropogenic GHG removals for this monitoring period	117,265 tCO ₂
Name of VVB	RINA Services S.p.A

Name, position and signature of the approver of the verification and certification report	 Laura Severino (Authorised officer signing for VVB) Decarb & Chain of Custody Product Management
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SECTION A. Executive summary

Purpose and general description of the project

The project, led by Juniper Green Sigma Private Limite, aims to generate electricity sustainably using solar power, contributing to climate change mitigation. It is a large-scale solar project that replaces approximately 275,350 tCO₂e of greenhouse gas emissions annually by displacing 292,335 MWh of electricity, which would otherwise come from India's fossil fuel-dominated power grid.

The project involves the installation of a 120 MW_{AC} grid-connected solar photovoltaic (PV) power plant. It officially started on March 4, 2020, with a 25 MW unit in Bilvaniya, Vantda Suka (Aravalli district) commissioned on 17-October-2020—the commercial operation date.

During the latest monitoring period, the project was estimated to reduce 138,806 tCO₂e emissions by displacing 147,368.88 MWh of electricity. The actual reductions achieved were 117,265 tCO₂e, displacing 124,498.63 MWh. The plant experienced no major breakdowns, and maintenance details are provided in Appendix 7 of MR.

The PV system comprises solar modules, mounting structures, inverters, regulators, and monitoring devices. Key electrical characteristics include:

- 3-phase alternating current
- 50 Hz nominal frequency
- Final voltage at delivery point: 66 kV

With a plant load factor of 28.36%, the project is expected to supply 292,335 MWh per year to the Indian grid, leading to an average annual reduction of 275,350 tCO₂e. No technology transfer is involved in this project.

Location

The project activity is in India at Sabarkantha, Banas kantha and Aravali district in Gujarat.

The villages included in these districts are:

- Village Bilvaniya, Vantda Suka, Tal. - Dhansura, Dist.-Aravali
- Village Babsar, Tal-Vadali, Dist. -Sabarkantha
- Village Bilvaniya, Vantda Suka, Tal–Dhansura, Dist. – Aravalli
- Village-Bhordu, Tal-Tharad, Dist.- Banas kantha

Scope of verification

Verification is the periodic, independent assessment conducted by a Designated Operational Entity (VVB) to review and confirm the monitored reductions in GHG emissions achieved by a registered Gold Standard (GS) project activity during a specified monitoring period. Certification is the formal written assurance provided by the VVB, affirming that the verified emission reductions were achieved during a defined timeframe.

The objective of this verification is to assess and certify the reported emission reductions for the 120 MW Solar PV Plant operated by Juniper Green Sigma Private Limited for the period from 01 July 2024 to 31 December 2024 (inclusive of both dates).

The scope of the verification is to verify that:

- The project activity has been implemented and operated in accordance with the registered PDD or any approved revised PDD.
- The monitoring plan, including compliance with any guidance provided by the Board regarding deviations from the provisions of a registered plan and/or methodology.
- The data and calculation of GHG emission reductions have been assessed to correctly support the emission reductions being claimed.

The verification shall ensure that reported emission reductions are complete and accurate to be certified.

Verification process

The verification is conducted following RINA's procedures, in accordance with Gold Standard (GS) requirements applicable at the time of verification. Standard auditing techniques are applied throughout the process. RINA assesses and determines whether the implementation and operation of the project activity, as well as the steps taken to report emission reductions, comply with GS criteria. The verification process includes a document review of relevant project records and a remote site assessment. However, requests for clarifications and/or corrective actions raised during the process may provide an input to improving the project's monitoring practices.

Conclusion

RINA commissioned by Infinite Environmental Solutions Limited to perform the verification of the emission reductions reported for the project activity 120 MW Solar PV Plant by Juniper Green Sigma Private Limited in Gujarat, GS Registration Reference No. 7572 for the monitoring period 01/07/2024 to 31/12/2024, with regard to the relevant GS requirements and principles for project activities. The project was validated by Applus+ Certification (FVR_GS7572, version 02 of 11/09/2020) and it was registered on 21/09/2020.

In conclusion 03 CRs, 03 CARs, 01 FARs, are identified in relation to all relevant GS requirements and the applied baseline monitoring methodology; The PDs are invited to respond to the issued listed in Appendix 4. PD has submitted the documented proof in the favour of all the findings raised. The Assessment team has examined and verified all the documented proof submitted and hence all findings were satisfactory closed.

The GHG emission reductions are calculated on the basis of the approved methodology ACM0002, Grid-connected electricity generation from renewable sources, version 20 of 28/11/2019. In our opinion the GHG emission reductions reported for the project in the monitoring report version 04 of 06/05/2025 are fairly stated.

SECTION B. Verification team, technical reviewer and approver

B.1. Verification team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)	Involvement in			
						Desk review	Remote-site inspection	Interview(s)	Verification findings
1.	Team Leader	IR	Pathak	Atin Kumar	RINA India	✓	✓	✓	✓
2.	Verifier in training	IR	Ramaswamy	Ramya	RINA India	✓	✓	✓	✓
3	Verifier in training	IR	Verma	Lata	RINA India	✓	✓	✓	✓
4	Verifier in training	IR	Kumar	Ashish	RINA India	✓	✓	✓	✓

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

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)
1.	Technical reviewer	IR	Amalorpavanathan	Cyril A A	RINA India
2	Approver	IR	Severino	Laura	RINA HO

SECTION C. Application of materiality

C.1. Consideration of materiality in planning the verification

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	Human error in the quantification of emissions (which may be more likely to occur if personnel are unfamiliar	Low	Being 8 th verification of the of the 1 st crediting period, the project proponent is familiar with monitoring procedures and	During the remote-site audit, the verification team interviewed staff from the GS team and reviewed all records to confirm the

	with, or not well trained regarding, emissions processes or data recording).		data reporting in line with the revised registered PDD and previous verification and certification reports. The prime monitoring parameter is net export to grid which is as per monthly generation report as recorded in calibrated energy meters. Hence, the risk level is low.	effective implementation of the monitoring plan. The key parameter used to determine the project's baseline emissions is the measurement of net electricity generation, which is recorded monthly as per the monitoring plan. The team thoroughly reviewed the complete dataset from the monthly reports and cross-checked it against the invoices issued. Additionally, the verification team examined relevant records to verify the proper implementation of data collection and QA/QC procedures.
2	Undue reliance on a poorly designed information system, which may have few effective quality controls.	Low	Being 8 th verification of the 1 st crediting period, the project proponent has already established a well-organized monitoring team, monitoring plan, including data collection procedure and QA/QC procedure consistent with registered monitoring plan. Monitoring equipments are calibrated at defined frequency. Hence, the risk level is low.	
3	Manual adjustment of otherwise automatically recorded activity levels.	Low	As detailed in section C.2 below, the data of the main monitoring parameters are taken from calibrated meters (energy meter) and can be verified from totalizer values. The monitoring equipment's are calibrated according to national standards and rules. Hence, the risk level is low.	
4	An omission, misstatement, or erroneous reporting of information is material if it might lead, at an aggregated level, to an overestimation of the total	Low	As outlined in Section C.2., the primary monitoring parameters are derived from calibrated energy meters and can be verified using totalizer values. The monitoring	

	GHG emission reductions or net anthropogenic GHG removals achieve by a registered GS project activity equal to or higher than the following thresholds:		equipment is calibrated in accordance with national standards and regulations, ensuring a low level of risk.	
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C.2. Consideration of materiality in conducting the verification

The project activity takes place across three sites, with 100% of the data available for verification. The electricity exported to the grid from each site is monitored and recorded using calibrated energy meters, ensuring complete data availability for verification. Net electricity generation, which directly impacts emission reduction calculations, is measured using calibrated electricity meters and is fully verifiable. In accordance with paragraph 329 and section 9.1.2.3.1 of the CDM Validation and Verification Standard, no significant reporting risks affecting the materiality of the verification were anticipated during the planning phase, nor were any identified during the verification process. The verification team conducted a comprehensive review of the entire dataset of monthly net electricity records without sampling. The data reported in the monitoring report aligns with the monthly records, and the emission reductions have been accurately calculated.

SECTION D. Means of verification

D.1. Desk review

The monitoring report Version 06 of 24/07/2025, the emission reduction calculations provided in the form of a spreadsheet version 04, of 04/07/2025, the approved baseline and monitoring methodology ACM0002 “Grid-connected electricity generation from renewable sources” version 20.0 dated 28 November 2019 /8/, and all the documentation provided to support the monitoring period /14-21/, was assessed as part of the verification. In addition, the Project Design Document (PDD) version 06 of 09/11/2020 /3/ were reviewed. The list of all documents reviewed are referenced during the verification is available in Appendix 3 below.

D.2. Remote-site inspection

A comprehensive desk review of the submitted Monitoring Reports (MR) was conducted by the Verification Team. This review covered MR Version 01.0 dated 28/02/2025, Version 02.0 dated 15/04/2025, Version 03.0 dated 05/05/2025, version 04.0 dated 06/05/2025, version 05.0 dated 04/07/2025, version 06.0 dated 24/07/2025 /01/ and all supporting evidence provided by the Project Developer (PD). The purpose of this review was to evaluate the accuracy and completeness of the reported monitoring data and to ensure compliance with the applicable requirements under the applied methodologies and the relevant Gold Standard procedures and guidelines.

The most recent onsite inspection was conducted on 14/07/2023 (5th monitoring period). In continuation of this, the audit team scheduled a remote site inspection on 10/03/2025 via videoconference (Microsoft Teams) with the Project Developer (PD).

In accordance Section 6 of the *112_V2.0_PAR_Site-Visit-and-Remote-Audit-Requirements* (Gold Standard) here is detailed remote auditing process:

- The VVB conducted a comprehensive desk review of the submitted Monitoring Reports (MRs) and supporting evidence, including MR, calibration certificates, commissioning certificates, photographic evidence, and meter serial numbers.
- Remote inspections were conducted through videoconference (Microsoft Teams) with the PD, focusing on the physical verification of equipment, monitoring systems, logbooks, and operational practices. The PD facilitated live video walkthroughs of the project site, demonstrating the installed meters, key equipment, and the monitoring setup.
- Structured interviews were conducted with the project's technical staff, operators, and management to confirm their understanding of the monitoring procedures and project operations, and to gather clarifications on data discrepancies, if any.
- The data and information shared via videoconference were cross-checked against the submitted MR and supporting documents. Additionally, time-stamped photographs and real-time screenshares of meter readings were used to verify the operational status of the project.
- Screenshots, video call records, and photographs were archived as evidence of the remote inspection process.

Duration of remote-site inspection: 10/03/2025				
No.	Activity performed remote site	Site location	Date	Team member
1.	Implementation and operation of the proposed project activity. Checked the monitoring equipment, interviewed key personnel of the plant to confirm the operational and data collection procedures, cross-checked between information provided in the monitoring report and data plant	1. Juniper Khadol 2. Juniper Babsar 3. Juniper Bhordu	10/03/2025	1. Atin Kumar Pathak 2. Ashish Kumar 3. Lata Verma 4. Ramya Ramaswamy
2	Reviewed the information flows for generating, aggregating and reporting the monitoring parameters			
3	Checked calibration performance, reviewed calculations and assumptions made in determining the GHG data and emission reductions			
4	Checked the quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters			
5	Cross-checked between information provided in the monitoring report and data evidence, including the Gold Standard parameters			

D.3. Interviews

A remote audit covering all project locations was conducted on 10/03/2025. As per the initial general contract established with PD, it was clearly indicated that PD would specify which information should be included in the public report and which information should remain confidential. This arrangement was established to protect commercially sensitive data and ensure compliance with the confidentiality obligations agreed upon by both parties while maintaining the transparency requirements of the reporting process. The VVB adhered to these confidentiality provisions throughout the audit, ensuring that only the information approved for public disclosure by PD is included in the final audit report.

Additionally, during the audit, the VVB conducted interviews with project stakeholders and staff. Prior to each interview, the VVB informed the interviewees about the purpose of the interview,

including the use of their names, and obtained their consent. Signatures were collected on the interview list issued by RINA, serving as confirmation that the interviewees have no objection to including their names in the report. The interview list is attached in Appendix 8 of this report.

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Patil	Harsh	Deputy manager (Babsar)	10/03/2025	Description of the project activity, Baseline and Additionality, Emission reductions calculations, Monitoring plan and monitoring arrangements, GS Sustainable Indicators (SDGs), Local stakeholder consultation, Environmental and social impacts	Atin Kumar Pathak, Ramya Ramaswamy, Lata Verma, Ashish Kumar
2.	Patel	Milap	Engineer (Babsar)			
3.	Patel	Ashish	Asst. Manager (Bhordu)			
4.	Suther	Arvind	Engineer (Bhordu)			
5.	Gogil	Sandeep	Asst. Manager (Khadol)			
6.	Patel	Aditya	Sr. Manager (Khadol)			
7.	Sinh	Mahendra	Stakeholder (Babsar)			
8.	Goswami	Parasgiri	Stakeholder (Babsar)			
9.		Narsih	Stakeholder (Bhordu)			
10.	Kadam	Raju	Stakeholder (Bhordu)			
11.	Gopal	Pagi	Stakeholder (Khadol)			
12.	Khant	Jigar	Stakeholder (Khadol)			

D.4. Sampling approach

Not applicable.

D.5. Clarification requests, corrective action requests and forward action requests raised

Areas of verification findings	No. of CR	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form			
Compliance of the project implementation with the registered PDD			
Post-registration changes			
Compliance of the monitoring plan with the monitoring methodology including applicable tool and standardized baseline			
Compliance of monitoring activities with the registered monitoring plan			
Compliance with the calibration frequency requirements for measuring instruments			
Assessment of data and calculation of emission reductions or net removals	CR 02	CAR 01, CAR 02, CAR 03	
Others (please specify)	CR 01, CR 03		
Total	03	03	

SECTION E. Verification findings**E.1. Compliance of the monitoring report with the monitoring report form**

Means of verification	The monitoring report latest version /1/ submitted by the PD have been the basis for starting the verification process. RINA confirms that the Monitoring report is based on the currently valid GS4GG MR template /9/.
Findings	NA
Conclusion	RINA audit team verified and confirmed that the monitoring report is prepared as per the recent GS4GG MR template /9/.

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

Based on the review of the Gold Standard Foundation /6/ validation report /4/, and previous verification report /12-13/, 01 FARs was raised and also successfully closed in Appendix 4.

Raised: 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.

Assessment: As per the Project Design Document (PDD), Monitoring Report, and supporting evidence submitted, the VVB has conducted a thorough review of the emission reduction calculations. Despite the variance observed between the estimated and actual emission reductions due to the lower Plant Load Factor (PLF), the achieved values remain within acceptable benchmark limits. The emission reduction calculations, reflecting these values, have been cross verified with the ER sheet and found to be consistent with the applied methodology and the requirements of the Gold Standard. Accordingly, no further action is required on this point. Hence the FAR is closed.

The Forward Action Request (FAR) raised during the previous verification period has been thoroughly reviewed, cross-checked, and verified during the current monitoring period. Upon evaluation, it has been confirmed that the issue has been satisfactorily addressed and resolved. Furthermore, no new FARs have been identified or raised in this monitoring period, indicating continued compliance with the applicable requirements.

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

Means of verification	The Monitoring Report for the project activity “120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. In Gujarat” /1/ submitted by Infinite Environmental Solutions Limited. It was verified during remote-site audit that the proposed project activity has been implemented, and it is in operation in accordance with the project activity described in the revised registered PDD /3/. The starting date of operation and 1st crediting period is 09/11/2020. According to the revised registered PDD /3/ and previous verification report /12-13/. As per the registered Monitoring Report (MR) /1/, validation report /4/, and previous verification report /12-13/, the project activity is a solar power plant with a total capacity of 120 MW, as confirmed by the commissioning certificate /14/. The generated electricity is sold to the grid. The location of the solar power plant is detailed in the MR, including its latitude and longitude, which have been verified through MR /1/. During the remote site audit, assessment team has verified the presence of grievance register at security gate at each project site. During this monitoring period no grievance have been registered. The same has been already verified during desk review process before the remote audit. The assessment team confirms that the project has been implemented in accordance with the registered MR /1/.
Findings	No issues were identified.
Conclusion	In view of the information’s verified during the remote audit and review of supporting documents, the verification team could confirm that all physical features (technology, project equipment, and monitoring and metering equipment) of the registered GS project activity are in place and that the project developers have operated the project activity as per the registered MR /1/ and transition annex. No information with regard to data and variables was identified that may surpass the estimated quantity of ERs in the registered MR /1/.

E.4. Post-registration changes

E.4.1. Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline

Not applicable

E.4.2. Corrections

Not applicable

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

Not applicable

E.4.4. Inclusion of a monitoring plan to a registered project activity

Not applicable

E.4.5. Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline

Not applicable

E.4.6. Changes to the project design of a registered project activity

Not applicable

E.4.7. Types of changes specific to afforestation and reforestation project activities

Not applicable

E.5. Compliance of monitoring plan with the monitoring methodology including applicable tool and standardized baseline

Means of verification	The project applies the approved methodologies ACM0002 “Consolidated baseline methodology for grid-connected electricity from renewable sources” version 20.0 of 28/11/2020 /8/. The tools that are applicable to this project activity are: Tool for the demonstration and assessment of additionality (Tool 1)- Version 7.0 /10/ Tool to calculate the emission factor for an electricity system (Tool 7)- Version 7.0 /11/
Findings	NA
Conclusion	The monitoring plan in the registered MR /1/ is in accordance with the monitoring methodology ACM0002 “Consolidated baseline methodology for grid-connected electricity from renewable sources” version 20.0 of 28/11/2020 /8/.

E.6. Compliance of monitoring activities with the registered monitoring plan**E.6.1. Data and parameters fixed ex ante or at renewal of crediting period**

Means of verification	The parameters were available at the verification stage, which do not need to monitor during the crediting period, as per the registered MR:			
	DATA/ PARAMETER	Source of data	Reported value for the project period	Assessment/ Observation

	EFgrid,CM,y (Combined Margin Emission Factor)	Central Electricity Authority: “CO2 Emission Database, Version 11”	0.9419 tCO2e/MWh	As per the approved methodology ACM0002 version 20.0 /8/, the combined emission factor has been determined using the ex-ante option and so it is not requested to monitor and recalculate the emission factors during the crediting period. The combined emission factor is determined to be 0.9419 tCO2e/MWh in the registered MR /1/.
	EFgrid,BM,y (Build Margin Emission Factor)	Central Electricity Authority: “CO2 Emission Database, Version 11”	0.8611 tCO2e/MWh	As per the approved methodology ACM0002 version 20. 0 /8/, the building emission factor has been determined using the ex-ante option and so it is not requested to monitor and recalculate the emission factors during the crediting period. The building emission factor is determined to be 0.8611 tCO2e/MWh in the registered MR /1/.
	EFgrid,OM,y (Operating Margin Emission Factor)	Central Electricity Authority: “CO2 Emission Database, Version 11”	0.9622 tCO2e/MWh	As per the approved methodology ACM0002 version 20.0 /8/, the operating emission factor has been determined using the ex-ante option and so it is not requested to monitor and recalculate the emission factors during the crediting period. The operating emission factor is determined to be

				0.9622 tCO ₂ e/MWh in the registered MR /1/.
Findings	NA			
Conclusion	The value in the monitoring report /1/ and corresponding emission reduction calculations spreadsheet /2/ are consistent with the registered PDD /3/. The applied value is correct and justified.			

E.6.2. Data and parameters monitored

Means of verification	The following parameter is monitored in accordance with the registered PDD /3/. The sole monitoring parameter is the “Quantity of net electricity generation supplied by the project plant to the grid in year y (EG_{facility,y}),” as specified in the registered monitoring plan within the PDD /03/. This parameter is continuously monitored in “MWh” using dedicated energy meters. The site is equipped with a metering system consisting of main, check, and standby meters, installed at the plant site and managed under the supervision of Gujarat Urja Vikas Nigam Limited (GUVNL). The main and check meters are used as the primary data sources, while the standby meter is utilized if both primary meters are unavailable due to maintenance or testing. The measurement of electricity imports and export is conducted based on monthly meter readings provided by the State Electricity Board (SEB), with readings jointly inspected and signed by authorized representatives of GUVNL and the project developer, Juniper Green Sigma Private Ltd. The net electricity supplied to the grid is calculated as the difference between electricity exported to the grid and electricity imported from the grid, as recorded in the monthly meter reading reports. The energy meters used for monitoring have an accuracy class of 0.2s, as confirmed through calibration records maintained at the plant. The meters undergo calibration every three years by an independent testing laboratory. The net power fed into the grid is verified through cross-referencing with invoices or monthly bills submitted by the project developer to GUVNL. According to the monitoring plan in the monitoring report, the estimated (EG_{facility,y}) is 124,498.63 MWh for the period from 01/07/2024 to 31/12/2024. The detailed calculation is provided by the project developer in a spreadsheet /2/. Actual SDGs monitored: • SDG 7 (7.2.1) – Affordable and Clean Energy: 124,498.63 MWh total net electricity supplied. • SDG 8 (8.5.1) – Employment development in the region and training programs conducted.
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	SDG 13 (13.2.1) – Emission Reduction: (To be calculated based on project methodology). The parameters outlined in this section have been monitored in accordance with the monitoring plan in the registered monitoring report /1/.
Findings	NA
Conclusion	RINA's opinion that the monitoring of the project activity has been carried out in accordance with the monitoring plan in the MR /1/.

E.6.3. Implementation of sampling plan

Means of verification	NA
Findings	NA
Conclusion	NA

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

Means of verification	Site in-charge is responsible for calibration and maintenance of the devices as per the registered MR /x/. The project owner does not have control over the meters, as they are under the supervision of Gujarat Urja Vikas Nigam Limited (GUVNL). In the event of any significant discrepancy between the meters, GUVNL performs the necessary calibration. Calibration of the meters was carried out on 20/06/2023 for Plant 1 (35 MW solar plant connected to Babsar Substation), on 08/07/2023 for Plant 2 (40 MW solar plant connected to Bhordu Substation), and on 08/08/2023 for Plant 3 (45 MW solar plant connected to Khadol Substation), as verified through the calibration certificates. As per the monitoring report /1/, the calibration frequency of the meters is once every three years in accordance with national regulations. The calibration of the meters is deemed appropriate and compliant with regulatory standards. During the remote site visit assessment, it was confirmed that the meters are in place and functioning properly.
Findings	NA
Conclusion	RINA's opinion that the monitoring of the project activity has been carried out in accordance with the monitoring plan in the revised registered PDD /3/.

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

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

Means of verification	Baseline emissions include only CO ₂ emissions from electricity generation in fossil fuel fired power plants that are displaced due to the project activity. The methodology 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:
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	$BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$ 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 The baseline emission for this monitoring period is, $BE_y = EG_{facility,y} \times EF_{grid,CM,y}$ $BE_y = 124,498.63 \times 0.9419$ $BE_y = 117,265 \text{ tCO}_2\text{e}$ (Rounded down) The details of verified calculation are provided by the PD via calculation spreadsheet /2/.
Findings	NA
Conclusion	RINA verified that the baseline emissions were calculated in accordance with the revised registered PDD and methodology ACM0002 “Grid-connected electricity generation from renewable sources” Version 20.0 /8/.

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

Means of verification	The project emissions are assumed to be zero as per the ACM0002 /8/ since the project is a renewable energy project as defined in the registered PDD /3/ and validation report /4/.
Findings	NA
Conclusion	RINA verified that the project emissions were assumed 0 in accordance with the registered PDD /3/ and methodology ACM0002 /8/.

E.8.3. Calculation of leakage GHG emissions

Means of verification	The leakage emissions are assumed to be zero as per the ACM0002 /8/ as defined in the revised registered PDD /3/. Since the project and leakage emissions are zero, the emission reduction equals to baseline emissions.
Findings	NA
Conclusion	Leakage was considered as zero in accordance with the applied methodology /8/.

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

Means of verification	According to the applied methodology “ACM0002 “Grid-connected electricity generation from renewable sources” Version 20.0 /8/., the emission reductions have been calculated based on the following formula:
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	Emission reductions are calculated as follows /2/: $ER_y = BE_y - PE_y - LE_y$ Where: ER_y = Emission reductions in year y (t CO₂/yr). BE_y = Baseline emissions in year y (t CO₂/yr). PE_y = Project emissions in year y (t CO₂/yr). LE_y = Leakage emissions in year y (t CO₂/yr). Baseline emission for this monitoring period= 124,498.63* 0.9419 tCO_{2e}/MWh = 117,265 tCO_{2e}. The details of verified calculation are provided by the PD via calculation spreadsheet /2/.
Findings	NA
Conclusion	The emission reduction calculations provided in the spreadsheet /2/ have been verified to be correct and in line with the revised registered PDD /3/ and applied methodologies /8/.

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

Means of verification	The emission reductions from the project for the monitoring period as reported in the monitoring report are equivalent to 117,265 tCO ₂ . The reported emission reductions 15.52 % lesser than the estimated emission reductions for the same monitoring period 01/07/2024 to 31/12/2024 (inclusive of both days) as per the registered PDD /3/ due to solar weather conditions. The calculation is verified through calculation spreadsheet /2/.
Findings	NA
Conclusion	The actual emission reduction is lesser than the estimated reduction given in the registered PDD /3/ and in ER /2/ provided by PD. This difference is mainly due to variations in climatic conditions and greater-than-expected sunlight availability.

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

Means of verification	The emission reductions from the project for the monitoring period as reported in the monitoring report are equivalent to 117,265 tCO ₂ . The reported emission reductions 15.52 % lesser than the estimated emission reductions for the same monitoring period 01/07/2024 to 31/12/2024 (inclusive of both days) as per the registered PDD /3/ due to solar weather conditions. The calculation is verified through calculation spreadsheet /2/.
Findings	NA
Conclusion	The actual emission reduction is lesser than the estimated reduction given in the registered PDD /3/ and in ER /2/ provided by PD. This difference is mainly due to variations in climatic conditions and greater-than-expected sunlight availability.

E.8.7. Actual GHG emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Means of verification	The emission reductions from the project for the monitoring period as reported in the monitoring report are equivalent to 117,265 tCO ₂ . The reported emission reductions 15.52% lesser than the estimated emission reductions for the same monitoring period 01/07/2024 to 31/12/2024 (inclusive of both days) as per the registered PDD /3/ due to solar weather conditions. The calculation is verified through calculation spreadsheet /2/
Findings	NA
Conclusion	The actual emission reduction is lesser than the estimated reduction given in the registered PDD /3/ and in ER /2/ provided by PD. This difference is mainly due to variations in climatic conditions and greater-than-expected sunlight availability.

E.8.8. Assessment of the sustainability parameters

Means of verification	of	The assessment of the monitored parameters is described in the tables below:										
		<table><tr><td>Data variable</td><td>Source of Data</td><td colspan="2">Reported value for the project period</td></tr><tr><td>Climate Action Amount of CO2 emission reduction (SDG 13)</td><td>Electricity Generation Calculation Spreadsheet /11/</td><td colspan="2">Emission reduction: 117,265 tCO2e</td></tr></table>			Data variable	Source of Data	Reported value for the project period		Climate Action Amount of CO2 emission reduction (SDG 13)	Electricity Generation Calculation Spreadsheet /11/	Emission reduction: 117,265 tCO2e	
		Data variable	Source of Data	Reported value for the project period								
		Climate Action Amount of CO2 emission reduction (SDG 13)	Electricity Generation Calculation Spreadsheet /11/	Emission reduction: 117,265 tCO2e								
		Assessment										
		Amount of CO ₂ , emissions: The electricity export and import are monitored continuously and reported monthly in Joint Meter Reading (JMR) provided. The monthly reported export and import values as per Joint Meter Reading and Net generation calculation. The values for the monitoring period are verified through supporting documents and calculations listed in Annex 03.										
		<table><tr><td>Data variable</td><td>Source of Data</td><td colspan="2">Reported value for the project period</td></tr><tr><td>Quantity of net electricity generation supplied by the project plant to the grid in year y (SDG 7)</td><td>Electricity meters Electricity Generation and Calculation</td><td colspan="2">124,498.63 MWh net electricity generation for MP.</td></tr></table>			Data variable	Source of Data	Reported value for the project period		Quantity of net electricity generation supplied by the project plant to the grid in year y (SDG 7)	Electricity meters Electricity Generation and Calculation	124,498.63 MWh net electricity generation for MP.	
		Data variable	Source of Data	Reported value for the project period								
		Quantity of net electricity generation supplied by the project plant to the grid in year y (SDG 7)	Electricity meters Electricity Generation and Calculation	124,498.63 MWh net electricity generation for MP.								
		Assessment										
<u>EG_{facility,y}</u> : This parameter is monitored by electricity meters and in this monitoring period totally 124,498.63 MWh is measured /27/ and calculated for the net electricity generation. The net electricity												

	generation values were controlled by the evidence of Joint meter readings and invoices /27/. The values for the monitoring period are verified through supporting documents and calculations.		
	Data variable	Source of Data	Reported value for the project period
	Quantitative employment and income generation (SDG 8)	Attendance list of the training's /24/.	22 employees are hired 08 trainings provided.
	Assessment <u>Employment Contracts and Rate of Local People:</u> This parameter is monitored on each verification by the attendees list and training details provided /23/ of employees. It was confirmed that 22 employees are hired by the project /23/.		
Findings	NA		
Conclusion	RINA verified that the GS indicators described in the monitoring report /1/ are accurate and real. Data to cross check the monitored parameters are available at the office of the company. Also, the registers of the sustainability indicators were checked to verify the same.		

SECTION F. Internal quality control

The draft final verification report before being submitted to the client will be/is subjected to an independent technical review to confirm that all validation activities has been completed according to the pertinent RINA's procedures. The technical review will be/is performed by a technical reviewer(s) qualified in accordance with the RINA's qualification procedure.

SECTION G. Verification opinion

RINA Services Spa (RINA) has performed verification of the emission reductions reported for the project activity "120 MW Solar PV Plant by Juniper Green Sigma Private Limited in Gujarat", GS Registration Reference No. 7572 for the period 01/07/2024 to 31/12/2024, with regard to the relevant GS requirements and principles. The project developers are responsible for the preparation for the collection of data in accordance with the monitoring plan and the reporting emission reductions from the project. It is RINA's responsibility to express an independent verification opinion on the reported emission reductions from the project and does not express any opinion on the selected baseline scenario or on the validated and registered PDD. Based on documented evidences and corroborated by an remote-site assessment RINA can confirm that: (i) the project has been implemented and operated as per the registered PDD; (ii) the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable GS requirements and principles; (iii) the monitoring is in place as per the applied baseline and monitoring methodology; (iv) the monitoring complies with the registered monitoring plan; (v) the monitoring plan in the registered PDD is as per the applied baseline and monitoring methodology.

SECTION H. Certification statement

It is RINA's opinion that the GHG emission reductions stated in the monitoring report version 04 of 06/05/2025 for the project activity "120 MW Solar PV Plant by Juniper Green Sigma Private Limited in Gujarat" in India, for the period 01/07/2024 to 31/12/2024 are fairly stated. The GHG emission reductions were calculated correctly on the basis of the approved monitoring methodology ACM0002 "Grid-connected electricity generation from renewable sources" Version 20.0. Hence RINA is able to certify that the emission reductions from the project during the monitoring period 01/07/2024 to 31/12/2024 amount to 117,265 tCO₂e.

Appendix 1. Abbreviations

Abbreviations	Full texts
BE	Baseline Emissions
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM M&P	Modalities and Procedures CDM
CER(s)	Certified Emission Reduction (s)
CH ₄	Methane
CL	Clarification Request
CO ₂	Carbon dioxide
CO ₂ e	Carbon dioxide equivalent
CRT	Coordination and Technical Control Staff
DCI	Certification Division of RINA Services Spa
DNA	Designated National Authority
VVB	Validation Verification Body
EB	Executive Board
ER	Emission Reductions
FAR	Forward Action Request
GCC	Global Carbon Council
GEDA	Gujarat Energy Development Agency
GHG(s)	Greenhouse gas (es)
GS	Gold Standard
GS4GG	Gold Standard for Global Goals
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
LoA	Letter of Approval
MoV	Means of Verification
MR	Monitoring Report
PDD	Project Design Document
PE	Project Emission
PD(s)	Project Developer (s)
REC	Renewable Energy Certificate
Ref.	Document Reference
GUVN	Gujarat Urja Vikas Nigam Limited
RINA	RINA Services Spa
SS(s)	Sectoral Scope (s)
TA(s)	Technical Area (s)
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

Appendix 2. Competence of team members and technical reviewers



CERTIFICATO DI QUALIFICA QUALIFICATION CERTIFICATE

Si attesta che il sig./sig.ra:
We declare that Mr/Mrs/Ms:

Atin Kumar Pathak

è qualificato come¹:
is qualified as:

TL – VAL – VER – TEC – REG-EXP³

nello schema²:
for the scheme:

VCS – GS4GG

per le seguenti aree tecniche:
for the following technical areas:

1.1 – 1.2 – 3.1 – 5.1 – 7.1 – 13.1 – 13.2 – 14.1 – 15.1

AREE TECNICHE TECHNICAL AREAS	DESCRIZIONE DELL'AREA TECNICA TECHNICAL AREA DESCRIPTION	SCOPO SETTORIALE SECTORAL SCOPE
1.1	Thermal energy generation	1
1.2	Renewables	1
3.1	Energy Demand	3
5.1	Chemical Industry	5
7.1	Transport	7
13.1	Solid waste and wastewater	13
13.2	Manure	13
14.1	Afforestation and Reforestation	14
15.1	Agriculture	15

in accordo alle istruzioni dell'Unità responsabile (OU) per sostenibilità & cambiamenti climatici.
in accordance with the instructions of the responsible unit (OU) for the sustainability & climate change.

REVISIONE REVISION	DATA DATE	MOTIVAZIONI PER LA REVISIONE REASON FOR THE REVISION
0	16/10/2024	First Issue
1	20/11/2024	Update qualification as TL
3	15/04/2025	Update sectoral scope 5, 7, 15

Il Resp. OU
Head of OU

Roma Scrima

¹ Legend:

VAL: Validator
VER: Verifier
TEC: Technical Expert
TL: Team Leader
FIN-EXP: Financial Expert
REG-EXP: Regional Expert
ITR: Independent Reviewer
DET: Déterminer

² Legend:

CDM: Clean Development Mechanism
VCS: Verified Carbon Standard
GS4GG: Gold Standard for Global Goals
SCS: SocialCarbon Standard
JI: Joint Implementation
ISO14064-2: International standard 14064 part 2

3 Indonesia, Thailand, Malaysia, Kyrgyzstan, Portugal, Estonia, Lithuania, Latvia, Africa Region

RINA Services S.p.A. è accreditata da UNFCCC, quale Entità Operativa Designata (DOE), per condurre la Validazione e la Verifica di Progetti CDM, da VCSA per condurre la Validazione e la Verifica di Progetti VCS, da GS Foundation, per condurre la Validazione e la Verifica di Progetti GS, da Ecologica Institute per condurre la Validazione e la Verifica di rapporti SCS.

RINA Services S.p.A. is accredited by the UNFCCC, as Designated Operational Entity (DOE), to carry out Validation and Verification of CDM Projects, by the VCSA, to carry out Validation and Verification of VCS Projects, by the GS Foundation, to carry out Validation and Verification of GS4GG Projects and by the Ecologica Institute, to carry out Validation and Verification of SCS Reports.

GHG_QUAL_CERT_EN(06-2021)

Page 1 of 2

**CERTIFICATO DI QUALIFICA PER GLI SCHEMI VOLONTARI*
QUALIFICATION CERTIFICATE FOR VOLUNTARY SCHEMES***

Si attesta che il sig./sig.ra:
We declare that Mr/Mrs/Ms:

Cyril Augustus Arokiasamy Amalorpavanathan

è qualificato come:
is qualified as:

TEC, VAL, VER, TL, Local Expert, ITRP, REG¹

per le seguenti aree tecniche:
for the following technical areas:

AREE TECNICHE TECHNICAL AREAS	DESCRIZIONE DELL'AREA TECNICA TECHNICAL AREA DESCRIPTION	SCOPO SETTORIALE SECTORAL SCOPE
1.1	Thermal energy generation	1
1.2	Renewables	1
4.1	Cement and Lime Production	4
3.1	Energy Demand	3
5.1	Chemical industry	5
13.1	Solid Waste and wastewater	13

REVISIONE REVISION	DATA DATE	MOTIVAZIONI PER LA REVISIONE REASON FOR THE REVISION
0	19/07/2016	First issue with new template (this certificate is linked to CDM qualification)
2	09/10/2017	Qualification update as ITRP

Responsabile di schema
Scheme Leader
Laura Severino



*SCHEMI VOLONTARI/ VOLUNTARY SCHEMES: ACR American Carbon Registry, CCB The Climate, Community & Biodiversity Alliance, GS Gold Standard, JI Joint Implementation, SCS Social Carbon Standard, VCS Verified Carbon Standard.

¹ Ghana, Azerbaijan, China, Sri Lanka, Bangladesh, Nepal, Thailand, Indonesia, Singapore, Malaysia, Cambodia, Vietnam, Philippines, UAE and Iraq, Brazil, Japan.

TEC: Technical expert; VAL: Validator; VER: Verifier; TL: Team leader; FIN EXP: Financial Expert; ITRP: Independent technical reviewer

RINA Services S.p.A. è accreditato/ricosciuto da
RINA Services S.p.A. is accredited /recognized by

UNFCCC	quali Entità Operativa Designata (DOE), per condurre la Validazione e la Verifica di Progetti CDM as Designated Operational Entity (DOE), to carry out Validation and Verification of CDM Projects
VCSA	per condurre la Validazione e la Verifica di Progetti VCS to carry out Validation and Verification of VCS Projects
GS Foundation	per condurre la Validazione e la Verifica di Progetti GS to carry out Validation and Verification of GS Projects
Ecologica Institute	per condurre la Validazione e la Verifica di rapporti SCS to carry out Validation and Verification of SCS Reports
American Carbon Registry ACR	per condurre la Validazione e la Verifica di Progetti ACR to carry out Validation and Verification of ACR projects
The Climate, Community & Biodiversity Alliance CCB	per condurre la Validazione e la Verifica di Progetti co-benefit CCB to carry out Validation and Verification of co-benefit CCB projects

GHG_QUAL_CERT_EN_07_16 Voluntary(Certificate)

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Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1	Infinite Environmental Solutions Limited	Monitoring Report; '120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat'	Version 01 Dated 28/02/2025 Version 02 Dated 15/04/2025 Version 03 Dated 05/05/2025 Version 04 Dated 06/05/2025 Version 05 Dated 04/07/2025 Version 06 Dated 24/07/2025	Project PropONENT
2	Infinite Environmental Solutions Limited	Emission Reduction Sheet: 120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat	Version 01 Dated 28/2/2025 Version 02 Dated 15/4/2025 Version 03 Dated 06/05/2025 Version 04 Dated 04/07/2025	Project PropONENT

3	Infinite Solutions	PDD, '120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat'	Version 06 Dated 11/1/2021	Publicly available
4	Applus Certification	Validation Report, '120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat'.	Version 02 Dated 11/9/2020	Publicly available
5	Gold Standard Foundation	Gold Standard for Global Goals Principles & Requirements	Version 1.2 Dated 23/10/2019	Publicly available
6	Gold Standard Foundation	Gold Standard for Global Goals Validation/Verification Body Requirements	Version 1.0 Dated 1/8/2022	Publicly available
7	CDM Executive Board	Clean Development Mechanism Validation and Verification Standard	Version 03.0 Dated 9/9/2021	Publicly available
8	CDM Executive Board	Baseline and monitoring methodology "ACM0002" "Consolidated baseline methodology for grid-connected electricity from renewable sources"	Version 20.0 Dated 28/11/2019	Publicly available
9	Gold Standard Foundation	Gold standard for the global goals Monitoring Report Template and Template Guide for Monitoring Report	Version 1.1 Dated 14/10/2020	Publicly available
10	CDM Executive Board	Tool for the demonstration and assessment of additionality (Tool 1)	Version 07.0 Dated 23/11/2012	Publicly available
11	CDM Executive Board	Tool to calculate the emission factor for an electricity system (Tool 7)	Version 07.0 Dated 31/08/2018	Publicly available
12	VKU Certification Private Limited	Verification Report, 120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat Monitoring Period: 01/07/2023 – 31/12/2023 (both dates included)	Version 1 Dated 13/7/23 Version 1.2 Dated 5/2/2024 Version 2.2 Dated 23/1/2024 Version 4 Dated 17/12/2024	Publicly Available
13	Applus Certification	120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. In Gujarat	Version 3 Dated 21/4/23	Publicly Available

		Monitoring Period: 01/07/2022 to 31/12/2022 (Both days included)	Version 4 Dated 16/8/2023	
14	Gujarat Energy Development Agency (GEDA)	JGSPL_120 MW Commissioning Certificate	Dated 28/10/2020	Project Propone nt
15	Juniper Green Energy Limited	Grievance Register for all three sites - Babsar - Bhordu - Khadol	July 2024 - December 2024 (For all three sites)	Project Propone nt
16	Juniper Green Energy Limited	Attendance sheet for all three sites - Babsar - Bhordu - Khadol	July 2024 month for all three sites	Project Propone nt
17	Juniper Green Sigma Private Limited	No double counting statement letter	25/02/2025	Project Propone nt
18	Juniper Green Energy Limited	JGEPL/HC- No discrimination Policy Letter	Rev Date: 16/7/19	Project Propone nt
19	Gold Standard	Annual Report Submission form	Version 3.0 Date 12/11/2024	Project Propone nt
20	Juniper Green Energy Limited	Sigma Breakdown Sheet- July 2024 to December 2024 for all three sites.	Date 25/02/2025	Project Propone nt
21	Juniper Green Sigma Private Limited	Sigma Expense Declaration Letter	Date 25/02/2025	Project Propone nt
22	Gold Standard	GS Registry for this project activity GS 7572 https://registry.goldstandard.org/projects?q=7572&page=1	Last date visited 22/3/25	Publicly Availabl e
23	Juniper Green Sigma	Employment records and Salary Slips of the employees	--	PD

	Private Limited			
24	Juniper Green Sigma Private Limited	Training Details 1. First Aid and CPR Training- Bhordu dated 23/09/2024 2. PTW Training – Bhordu dated 04/10/2024 3. Fire training and Demonstration – Bhordu dated 11/10/2024 4. L)TO Training – Bhordu dated 18/10/2024 5. Work at height – Bhordu dated 21/10/2024 6. First Aid and CPR Training- Babsar dated 23/09/2024 7. Fire Training – Babsar dated 28/09/2024 8. First Aid and CPR Training- Khadol dated 23/09/2024	--	PD
25	Juniper Green Sigma Private Limited	Power Purchase Agreement between Juniper Green Sigma Private limited and Gujarat Urja Vikas Nigam Limited, dated 21/05/2019, reference no.: GUVNL/COM/GM(IPP)/RE/544	--	PD
26	Juniper Green Sigma Private Limited	Calibration Certificate Certificate checked: 1) Babsar (GJ4583A) – Test Report No.- HML/T/20-06/5076/01 dated 20/06/2023 by Hi-tech Meter Laboratory 2) Bhordu (GJ4603A) – Test Report No.- HML/T/08-07/5159/01 dated 08/07/2023 by Hi-tech Meter Laboratory 3) Khadol (GJ4606A) – Test Report No.- HML/T/08-08/5215/01 dated 08/08/2023 by Hi-tech Meter Laboratory Complete details are mentioned in the appendix - 5	--	PD
27	Juniper Green Sigma Private Limited	JMR and Invoices (Period: 01/07/2024 to 31/12/2024)	--	PD
28	Juniper Green	Breakdown details (Period: 01/07/2024 to 31/12/2024)	--	PD

	Sigma Private Limited	Complete details of shutdown are present in Appendix - 07		
29	Gold Standard Foundation	GS4GG <u>Validation and Verification standard</u> , Ver 2.0.	--	Publicly Available
30	VKU Certification Private Limited	Verification Report, 120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. in Gujarat Monitoring Period: 01/01/2024 – 30/06/2024 (both dates included)	Version 05 of 17/12/2024	Publicly Available

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

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

FAR ID	01	Section no.		Date: 22/07/2025
Description of FAR				
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.				
Project developer response				Date: 22/07/2025
The actual achieved emission reductions for this monitoring period are 15.52% lower than the estimated value outlined in the Project Design Document (PDD) for the same period. Similarly, for the calendar year, the reduction is 2.61% lower than the registered PDD estimate. The primary factor contributing to this decline in emission reductions is the lower Plant Load Factor (PLF). According to the PDD, the estimated PLF was 28.36%. However, during the current monitoring period, the actual PLF achieved was 23.49%, while for the calendar year, it stood at 27.08%. These values remain within the acceptable benchmark limits, and the calculation is also mentioned in the ER sheet.				
Documentation provided by project developer				
VVB assessment				Date: 22/07/2025
As per the Project Design Document (PDD), Monitoring Report, and supporting evidence submitted, the VVB has conducted a thorough review of the emission reduction calculations. Despite the variance observed between the estimated and actual emission reductions due to the lower Plant Load Factor (PLF), the achieved values remain within acceptable benchmark limits. The emission reduction calculations, reflecting these values, have been cross verified with the ER sheet and found to be consistent with the applied methodology and the requirements of the Gold Standard. Accordingly, no further action is required on this point. Hence the FAR is closed.				

Table 2. CR from this verification

CR ID	01	Section no.	MR	Date: 27/03/2025
Description of CR				
PD is requested to provide the following documents: • Evidence for training conducted • Calibration certificate • Employment details and employee salary slips • Joint meter readings and Invoices for monitoring period				
Project developer response				Date: 15/04/2025

• Evidence for training conducted has been submitted along with DVR responses. • Calibration certificate has been submitted. • Employment details along with the sample salary slip have been submitted. • Joint meter reading and Invoices has been submitted.	
Documentation provided by project developer	
1. Training Record (Attendance sheet) 2. Calibration certificates 3. Attendance sheet, salary slip 4. Invoice, SEA report	
VVB assessment	Date: 24/04/2025
The Project Proponent is requested to provide supporting evidence for the trainings referenced in the Monitoring Report (attendance sheets, photographs, feedback forms, or any other relevant documentation). Hence the CR is Still Open.	
Project developer response	Date: 05/05/2025
The PD has submitted the Attendance sheet along with the responses.	
VVB assessment	Date: 06/05/2025
The training details in the submitted attendance sheet do not match those provided in the MR appendix. The PD is requested to update the information accordingly. Therefore, the CR remains open.	
Project developer response	Date: 06/05/2025
The training details have been corrected under the Appendix 2 of the MR, and the revised information has been submitted along with the responses for cross-verification.	
VVB assessment	Date: 06/05/2025
The PD has addressed the query by correcting and updating the MR, which has been cross-verified by the RINA team. Accordingly, the CR is now closed.	

CR ID	02	Section no.	MR	Date: 27/03/2025
Description of CR				
PD is requested to provide a justification for the observed reduction of -15.52% in the actual achieved emission reduction during the monitoring period from the estimated/registered value.				
Project developer response				Date: 15/04/2025
The actual achieved emission reductions for this monitoring period are 15.52% lower than the estimated value outlined in the Project Design Document (PDD) for the same period. Similarly, for the calendar year, the reduction is 2.61% lower than the registered PDD estimate. The primary factor contributing to this decline in emission reductions is the lower Plant Load Factor (PLF). According to the PDD, the estimated PLF was 28.36%. However, during the current monitoring period, the actual PLF achieved was 23.49%, while for the calendar year, it stood at 27.08%. The reduction in PLF is primarily due to fewer sunshine hours and lower irradiance levels. Consequently, the decrease in power generation was driven by external environmental factors beyond the control of the project developer.				
Documentation provided by project developer				

ER Sheet (Comparison mentioned)			
VVB assessment			Date: 24/04/2025
The Project Proponent has provided a justification for the observed 15.52% reduction in the actual achieved emission reductions. The RINA team has cross-checked the explanation and found it to be satisfactory. Therefore, the CR is considered closed.			
CR ID	03	Section no.	A. 1
Description of CR			
PD is requested to provide the following documents:			
- PD shall include that the project activity is not register in any other registry and also state in the MR that they cannot claim VERs for the same vintage in another standard other than GS. PD shall include that there is no double counting with national climate policies or programs. - The PD shall provide a declaration, in writing, in the monitoring report to state that the PD has not or will not issue ER for the same vintage from this project under any other carbon market mechanism. - PD shall include that the GHG emissions reductions from the project activity are not accounted for within the relevant system of the host country/ regulator or any voluntary mechanism.			
Project developer response			Date: 15/04/2025
- The sentence is already included in the MR under section A.1. - The sentence is already included in the MR under section A.1. - The sentence is already included in the MR under section A.1.			
Documentation provided by project developer			
Revised MR V.02			
VVB assessment			Date: 24/04/2025
PD has provided the documents and revised the MR. Hence, The CAR is closed.			

Table 3. CAR from this verification

CAR ID	01	Section no.	E5.1	Date: 27/03/2025
Description of CAR				
PD is requested to revise the table in this section.				
Project developer response				Date: 15/04/2025
The table has been revised under the section E5.1				
Documentation provided by project developer				
Revised MR V.02				
VVB assessment				Date: 24/04/2025
PD has revised the information and updated the MR. Hence the CAR is Closed.				
CAR ID	02	Section no.	E 6	Date: 27/03/2025

Description of CAR	
PD is requested to check and revise the section.	
Project developer response	Date: 15/04/2025
The section E6 has been checked and revised.	
Documentation provided by project developer	
Revised MR V.02	
VVB assessment	Date: 24/04/2025
PD has revised the information and has provided the updated MR. Henc the CAR is Closed.	

CAR ID	03	Section no.	Appendix – 3	Date: 24/04/2025
Description of CR				
PD is requested to review the total maintenance and downtime for the current monitoring period.				
Project developer response				Date: 05/05/2025
The previously mentioned downtime of 25:31 minutes was a typographical error. The Project Developer (PD) has now corrected the figure to 26:31 minutes, and the revision has been updated accordingly in the table under the Appendix 3 of the Monitoring Report (MR).				
Documentation provided by project developer				
Revised MR V.04 and Excel V.03				
VVB assessment				Date: 06/05/2025
PD is requested to recheck the total maintenance and downtime for the current monitoring period, as the revised figures still do not align with the breakdown provided in the Excel sheet.				
Project developer response				Date: 06/05/2025
The PD has verified the total maintenance and downtime recorded for the current monitoring period. The calculated breakdown duration has been documented in the Excel sheet for cross-verification. The total breakdown time is confirmed to be 26:31:00, as referenced in the Excel sheet.				
VVB assessment				Date: 06/05/2025
The RINA team has reviewed and verified the calculation, finding it satisfactory. Therefore, the CAR is considered closed.				

Table 4. FAR from this verification

FAR ID	Xx	Section No.		Date: DD/MM/YYYY
Description of FAR				
Project developer response				Date: DD/MM/YYYY
Documentation provided by project developer				
VVB assessment				Date: DD/MM/YYYY

Appendix 5. Meter Details

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

S.No.	Meter Number	Type	Make	Accuracy class	Date of calibration	Due date	Calibration Agency	Test Report No.
1	GJ4583 A	Main meter	Secure	0.2s	20/06/2023	19/06/2026	Hi-tech Meter Laboratory	HML/T/20-06/5076/01
2	GJ4584 A	Check meter	Secure		20/06/2023	19/06/2026		HML/T/20-06/5076/03
3	GJ4585 A	Standby meter	Secure		20/06/2023	19/06/2026		HML/T/20-06/5076/05

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

S.No.	Meter Number	Type	Make	Accuracy class	Date of calibration	Due date	Calibration Agency	Test Report No.
1	GJ4603 A	Main meter	Secure	0.2s	08/07/2023	07/07/2026	Hi-tech Meter Laboratory	HML/T/08-07/5159/01
2	GJ4604 A	Check meter	Secure	0.2s	08/07/2023	07/07/2026		HML/T/08-07/5159/03
3	GJ4605 A	Standby meter	Secure	0.2s	08/07/2023	07/07/2026		HML/T/08-07/5159/05

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

S.No.	Meter Number	Type	Make	Accuracy class	Date of calibration	Due date	Calibration Agency	Test Report No.
1	GJ4606 A	Main meter	Secure	0.2s	08/08/2023	07/08/2026	Hi-tech Meter Laboratory	HML/T/08-08/5215/01
2	GJ4607 A	Check meter	Secure	0.2s	08/08/2023	07/08/2026		HML/T/08-08/5215/03
3	GJ4608 A	Standby meter	Secure	0.2s	08/08/2023	07/08/2026		HML/T/08-08/5215/05

Appendix 6. Training Details

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

S.No.	Date	Topics	Number of participants
1	23/09/2024	First Aid and CPR Training	3
2	28/09/2024	Fire Training	3

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

S.No.	Date	Topics	Number of participants
1	23/09/2024	First Aid and CPR Training	3

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

S.No.	Date	Topics	Number of participants
1	23/09/2024	First Aid and CPR Training	3
2	04/10/2024	PTW training	4
3	11/10/2024	Fire Training and Demonstration	4
4	18/10/2024	LOTO Training	4
5	21/10/2024	Work at Height Training	4

Therefore, the total number of trainings conducted for both the sites in the current monitoring period are 08.

Appendix 7. Shutdown details/major maintenance or disruption in power generation

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

Date	B/d Description	Start time	Stop time	Total down time Hrs.
14-Jul-24	Grid BD from GSS	8:45	8:54	0:09
14-Jul-24	Grid BD from GSS	9:28	9:44	0:16
17-Jul-24	Grid BD from GSS	6:24	7:30	1:06
17-Jul-24	Grid BD from GSS	12:24	12:33	0:09
19-Jul-24	Grid BD from GSS	11:44	11:54	0:10
22-Jul-24	Grid BD from GSS	18:20	18:29	0:09
29-Jul-24	Grid BD from GSS	12:55	13:05	0:10
31-Jul-24	Grid BD from GSS	14:37	15:00	0:23
6-Aug-24	Grid BD from GSS	11:36	11:46	0:10
10-Aug-24	Grid BD from GSS	12:42	12:57	0:15
28-Aug-24	Grid BD from GSS	12:10	12:20	0:10
30-Aug-24	Grid BD from GSS	12:54	13:05	0:11
5-Sep-24	Grid BD from GSS	7:00	7:30	0:30
6-Sep-24	Grid BD from GSS	13:36	13:48	0:12
15-Sep-24	Grid BD from GSS	11:07	11:16	0:09
30-Oct-24	Grid BD from GSS	15:36	15:50	0:14
22-Nov-24	Grid BD from GSS	9:44	10:05	0:21
29-Nov-24	Grid BD from GSS	16:36	17:07	0:31
12-Dec-24	Grid BD from GSS	10:12	11:07	0:55
16-Dec-24	Grid BD from GSS	7:53	12:26	4:33
27-Dec-24	Grid BD from GSS	17:28	17:31	0:03
Total				10:46:00

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

Date	B/d Description	Start time	Stop time	Total down time Hrs.
20-Jul-24	Grid BD from GSS	6:11	6:22	0:11
31-Jul-24	Grid BD from GSS	12:12	12:28	0:16
5-Aug-24	Grid BD from GSS	13:41	13:52	0:11
17-Aug-24	Grid BD from GSS	12:07	12:19	0:12
22-Aug-24	Grid BD from GSS	17:36	17:54	0:18
10-Sep-24	Grid BD from GSS	9:03	9:34	0:31
23-Oct-24	Grid BD from GSS	8:13	16:24	8:11
21-Nov-24	Grid BD from GSS	11:37	12:01	0:24
22-Nov-24	Grid BD from GSS	11:41	12:09	0:28
22-Nov-24	Grid BD from GSS	12:11	12:25	0:14
26-Nov-24	Grid BD from GSS	11:49	12:03	0:14

26-Nov-24	Grid BD from GSS	16:04	16:22	0:18
21-Dec-24	Grid BD from GSS	7:45	10:15	2:30
Total				13:58:00

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

Date	B/d Description	Start time	Stop time	Total down time Hrs.
30-Sep-2024	Grid BD from GSS	8:50	9:11	0:21
30-Sep-2024	Grid BD from GSS	9:33	9:44	0:11
03-Oct-2024	Grid BD from GSS	6:42	7:13	0:31
08-Oct-2024	Grid BD from GSS	9:32	9:44	0:12
08-10-2024	Grid BD from GSS	9:45	9:59	0:14
22-Oct-2024	Grid BD from GSS	10:31	10:49	0:18
Total				1:47:00

Therefore, the total maintenance and downtime for the current monitoring period is 26:31:00 hrs.

Appendix 8. Interview List



INTERVIEW LIST

File no: 2025 GQ CE 69

Standard/Project ID: GS7572

Project Title: 120 MW Solar PV Plant by Juniper Green Sigma Private Ltd. In Gujarat		Client: Infinite Environmental solutions Limited		
		Location: Gujarat		
Person's Name	Occupation	Village/Organization	Topic	Signature
Harsh Patel	Deputy manager	Juniper Green Sigma Private Limited		<i>Harsh Patel</i>
Milap Patel	Engineer	Juniper Green Sigma Private Limited		<i>Milap Patel</i>
Mahendra Singh	Stakeholder	Village-Babsar		<i>મહેન્દ્ર સિંહ</i>
Parasgiri Gosvami	Stakeholder	Village - Babsar		<i>પારસગોસ્વામી</i>
Ashish patel	Assistant manager	Juniper Green Sigma Private Limited		<i>Ashish</i>
Arvind Suther	Engineer	Juniper Green Sigma Private Limited		<i>Arvind</i>
Narsingh	Stakeholder	Village - Bhordu		<i>નરસિંહ</i>
Raju Kadam	Stakeholder	Village - Bhordu		<i>રાજુ</i>
Sandeep Golip	Assistant manager	Juniper Green Sigma Private Limited		<i>Sandeep</i>
Aditya Patel	Sr.Manager	Juniper Green Sigma Private Limited		<i>Aditya Patel</i>
Pagi Gopal	Stakeholder	Village -Khadol		<i>પગીગોપાલ</i>
Jigar	Stakeholder	Village -Khadol		<i>Jigar</i>