

**GOLD STANDARD FOR THE GLOBAL GOALS (GS4GG)
REPORT
-
VERIFICATION**



Project Title:	Panasolar Photovoltaic Project
Monitoring Period:	04/11/2019 to 30/11/2023 (both days included)
GS project ID:	3556
Internal ID:	BELL_GS_VER_24323
Customer:	Panasolar Generation S.A.
Date:	21/08/2025
Revision:	03.0

SUMMARY																													
GS4GG Certified Product (sought):			GHG Emission Reductions																										
GS4GG SDG Impact Statement (sought):			Not Applicable																										
General Information																													
Client		Panasolar Generation S.A.																											
Project Title		Panasolar Photovoltaic Project																											
GS project ID		3556																											
Internal ID:		BELL_GS_VER_24323																											
Project Participants		Panasolar Generation S.A.																											
Project Location		City of Aguadulce, borough of El Roble, Coclé State, Panama																											
Contact Person		Enrico Desiata																											
Monitoring Period:		04/11/2019 to 30/11/2023																											
Initial Monitoring Report Version: 1 Date: 01/12/2023			Final Monitoring Report Version: 1.9 Date: 18/08/2025																										
GS4GG Sectoral Scope: 2			UNFCCC CDM Sectoral Scope: 1 Technical Area: 1.2																										
Product Vintages																													
<table><tr><th>Start Dates</th><th>End Dates</th><th>GS VERs (SDG 13)</th><th>Net Generation (SDG 7)</th></tr><tr><td>04/11/2019</td><td>31/12/2019</td><td>1,180 tCO₂e</td><td>2,260.62 MWh</td></tr><tr><td>01/01/2020</td><td>31/12/2020</td><td>6,852 tCO₂e</td><td>14,104.84 MWh</td></tr><tr><td>01/01/2021</td><td>31/12/2021</td><td>6,352 tCO₂e</td><td>14,796.43 MWh</td></tr><tr><td>01/01/2022</td><td>31/12/2022</td><td>5,910 tCO₂e</td><td>14,122.27 MWh</td></tr><tr><td>01/01/2023</td><td>30/11/2023</td><td>6,306 tCO₂e</td><td>14,732.52 MWh</td></tr></table>						Start Dates	End Dates	GS VERs (SDG 13)	Net Generation (SDG 7)	04/11/2019	31/12/2019	1,180 tCO ₂ e	2,260.62 MWh	01/01/2020	31/12/2020	6,852 tCO ₂ e	14,104.84 MWh	01/01/2021	31/12/2021	6,352 tCO ₂ e	14,796.43 MWh	01/01/2022	31/12/2022	5,910 tCO ₂ e	14,122.27 MWh	01/01/2023	30/11/2023	6,306 tCO ₂ e	14,732.52 MWh
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Year	Jobs created	Payroll above minimum wage	Locally hired employees	Training events	PPE provision																								
2019	12	100%	100%	2	100%																								
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Actual achieved values for each SDG during this monitoring period: SDG 7: 60,016.69 MWh SDG 13: 26,600 tCO ₂ e SDG 8: 12 employees, 10 trainings and operation of water tank in the local community. For details, see section 3.5 below.																													
Comparison of actual SDG Impacts with estimates in approved PDD:																													

SDG	PDD values (ex-ante)	MR values (ex-post)
7	80,098.38 MWh	60,016.69 MWh
13	42,051 tCO ₂ e	26,600 tCO ₂ e
8	7 employees	12 employees
	2 trainings per year	2 trainings per year, total of 10
	Operation of water tank in the local community	Correct operation of water tank in the local community

Verification Summary

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by "Panasolar Generation S.A." to perform the first periodical verification of the project "Panasolar Photovoltaic Project" applying the methodology AMS-I.D. Grid connected renewable electricity generation Ver. 18 for the 1st crediting period.

During the current verification, one (1) Clarification Request (CL), nine (9) Corrective Action Requests (CARs) and one (1) Further Action Request (FARs) have been raised.

Anaconda Carbon S.A. is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions.

A desk review and follow up have been conducted to verify the data submitted in the monitoring report. Applus+ Certification confirms the following has been reviewed:

- (a) The registered PDD, GS Passport and Gold Standard for the Global Goals (GS4GG) Transition Annex for the 1st crediting period and the Key Project Information, including the monitoring plan and the corresponding validation report;
- (b) Monitoring report(s);
- (c) The applied monitoring methodology;
- (d) Relevant decisions, clarifications and guidance from the CMP;
- (e) The GS4GG Version 2.0 and related Annex.

All information and references relevant to the project activity's resulting in emission reductions.

The project consists in the installation, operation, and maintenance of photovoltaic panels. This energy is captured by photovoltaic modules, with an installed capacity of 9.9 MW AC and 12.09 MW DC. These panels are placed on fixed structures anchored to the ground. The project activity will connect to the 34.5 KV substation in Llano Sanchez, via a mix (underground and aerial) transmission line. The purpose of the project activity is to utilize solar power to generate electricity. The project will contribute to the reduction of GHG emission by displacing part of the electricity from fossil fuel-fired power plants.

Applus+ Certification confirms that the project is implemented in accordance with the validated and registered PDD, GS Passport and Transition Annex.

The monitoring plan complies with the applied methodology and the Principles and Requirements of the GS4GG Version 2.0, the monitoring has been carried out in accordance with the monitoring plan. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the projects GHG emissions and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information reviewed and evaluated, Applus+ Certification confirms that the implementation of the project has resulted in **26,600 tCO₂e** emission reductions during period **04/11/2019 to 30/11/2023**.

ASSESSMENT TEAM		
Team Members	Type of Resource ¹	Organization (for OEs)
GS approved Lead Auditor: Raúl González Mitre	EI	NOVA CERT, LLC
Technical Expert: Raúl González Mitre	EI	NOVA CERT, LLC
Technical Reviewer / Technical Expert: Denny Xue	EI	NA
¹ IR (Internal Resource); EI (External Individual); OE (Outsourced Entity)		

ABBREVIATIONS	
AMS-I.D	Grid connected renewable electricity generation Ver. 18
Applus+ Certification / Applus+	LGAi Technological Center, S.A. (Applus+)
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL / CR	Clarification Request
CM	Combined Margin
CND	Dispatch National Center / Centro Nacional de Despacho
DNA	Designated National Authority
EF	Emission Factor
EIA	Environmental Impact Assessment
ER	Emission Reduction
ETESA	Electricity Transmission Company "Empresa de Transmisión Eléctrica"
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
GS4GG (or GS)	Gold Standard for Global Goals
IPCC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
MR	Monitoring Report
NGO	Non-Governmental Organization
SDG	Sustainable Development Goal
OM	Operational Margin
PDD	Project Design Document
PP	Project Participant
S/N	Serial Number
UNFCCC	United Nations Framework Convention for Climate Change
VVB	Validation and Verification Body
VT	Verification Team
VVS	Validation and Verification Standard

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1. INTRODUCTION

1.1 Objective

LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by "Panasolar Generation S.A." to perform the first periodical verification of the project "Panasolar Photovoltaic Project" (GS Ref. No. 3556) applying the methodology AMS-I.D. Grid connected renewable electricity generation Ver. 18. Gold Standard projects must undergo periodic audits and verification of emission reductions as the basis for issuance of Gold Standard VERs

The objective of the verification work is to comply with the Principles and Requirements GS4GG Version 2.0. According to this assessment Applus+ Certification shall:

- Ensure that the project activity has been implemented and operated for the first crediting period as per the registered PDD, GS Passport and the transition Annex and that all physical features (technology, project equipment, monitoring and metering equipment) of the project are in place;
- Ensure that the published MR and other supporting documents provided are complete, verifiable and in accordance with applicable VVS and Gold Standard requirements;
- Ensure that the actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology;
- Evaluate the data recorded and stored as per registered PDD.

1.2 Scope

The verification scope encompasses an independent and objective review and ex-post determination of the monitored reductions in GHG emissions by the VVB. The verification is based on the submitted monitoring report, the validated and registered PDD, GS Passport and transition Annex, as well as its validation report, the applied monitoring methodology, relevant decisions, clarifications and guidance from the CMP and the EB, the GS4GG Principles and Requirements, version 2.0 and any other information and references relevant to the project activity's resulting emission reductions.

Based on the requirements in the last version of the GS Validation and Verification Standard for project activities as well as the GS4GG Principles and Requirements, version 2.0, Applus+ Certification has applied a rule-based approach for the verification of the project. The principles of accuracy, completeness, relevance, reliability and credibility were combined with a conservative approach to establish a traceable and transparent verification opinion.

The verification considers both quantitative and qualitative information on emission reductions. The verification also considers the monitoring of sustainable parameters.

The verification is not meant to provide any consultancy towards the client. However, stated requests for clarifications, corrective and/or forward actions may provide input for improvement of the monitoring activities.

1.3 Description of the project activity

Project activity:	Panasolar Photovoltaic Project
Gold Standard registration number:	3556
Project Participants:	Panasolar Generation S.A. (Project Owner)
Location of the project:	City of Aguadulce, borough of El Roble, Coclé State, Panama
Design Certification date:	04/11/2019
1 st crediting period	04/11/2019 - 03/11/2026 (as per post-design cert. change)
1 st Monitoring period (current)	04/11/2019 to 30/11/2023

The project consists in the installation, operation, and maintenance of photovoltaic panels. This energy is captured by photovoltaic modules, with an installed capacity of 9.9 MW AC and 12.09 MW DC. These panels are placed on fixed structures anchored to the ground. The project activity will connect to the 34.5 KV substation in Llano Sanchez, via a mix (underground and aerial) transmission line. The purpose of the project activity is to utilize solar power to generate electricity.

2. METHODOLOGY

Applus+ Certification's approach to the verification is a two-stage process.

In the 1st stage, Applus+ Certification completed a strategic review and risk assessment of the project activities and processes in order to gain a full understanding of:

- Activities associated with all the sources contributing to the project emissions and emission reductions, including leakage if relevant;
- Protocols used to estimate or measure GHG emissions from these sources;
- Collection and handling of data;
- Controls on the collection and handling of data;
- Means of verifying reported data; and
- Compilation of the monitoring report.

Applus+ Certification uses a verification approach which is based on the risk-based assessment of the parameters and data collection and handling processes for each of those parameters, describes the verification approach and the sampling plan.

In the 2nd stage, Applus+ Certification verified the implementation of the monitoring plan and the data presented in the Monitoring Report for the period in question. This involved a site visit (if applicable) and a desk review of the Monitoring Report. This Verification Report describes the findings of this assessment.

2.1 Appointment of the assessment team

According to the applicable sectoral scope / technical area and experience in the sectoral or national business environment, Applus+ Certification has composed an assessment team in compliance with the Contract Review and Assessment Team appointment rules in the internal Quality Management System of LGAI Technological Center S.A. (Applus+ Certification) as well as in compliance with the applicable requirements in the Accreditation Standard.

The composition of the Assessment Team has been approved by LGAI Technological Center S.A. (Applus+ Certification) Central site during its Contract Review process, ensuring that the required skills and capabilities are covered by the team.

The qualification levels for Assessment Team members that are assigned by aforementioned appointment rules are as presented below:

- Lead Auditor (LA).
- Auditor (A).
- Technical Expert (TE).
- Technical Reviewer (TR).
- Other Supporting roles such as Financial Expert (FE) or Country Expert (CE) /Local Expert (LE)
- Any of the above-mentioned roles in training (iT, e.g. AiT for auditor in training, TEiT for Technical Expert in Training, etc.).

The sectoral scope / technical area knowledge linked to the applied methodology/ies shall be covered by the assessment team.

Name	Role	SS Coverage	TA Coverage	Financial aspect	Host country experience
Raúl González Mitre	LA/TE	1	1.2	Yes	Yes
Denny Xue	TR/TE	1	1.2	Yes	Yes

The curriculum vitae of the VVB's validation team members are provided below:

Raul G. Mitre, PhD, is a professional with more than 17 years of experience in climate change and sustainability, specialized in Monitoring, Reporting and Verification (MRV) evaluating more than 300 projects in more than 20 countries all over the globe.

Raul has a degree in Industrial Administration, specializing in productivity and quality from the National Polytechnic Institute of Mexico. He holds a Master's degree in Quality Management from the University La Salle of México City, a Master's degree in Project Management from the University Ramon Llull of Barcelona, a postgraduate degree in Integrated Management Systems from the University of Wismar in Germany, an MBA from the University La Salle of Andorra and a PhD in Sustainability - Climate Change with the Pan American Center for Higher Education in Mexico.

He is also an international auditor of ISO 9001 (quality), ISO 14001 (environment), ISO 45001 (occupational safety), ISO 37001 (anti-bribery), ISO 50001 (energy efficiency), ISO 14064-1 (GHG quantification & reporting for organizations) ISCC (International Sustainability Carbon Standard and RSB (Roundtable of Sustainable Biomaterials).

Currently he is associated with NOVA CERT, LLC (Applus+ Certification's Outsourced Entity).

Mr. Raul G. Mitre is based in Germany.

Mr. Denny Xue (Master's Degree in Environmental Engineering, Bachelor's Degree in Thermal Engineering) is an Auditor appointed by Applus+ Certification (LGAI Technological Center, S.A) for the GHG project assessment, auditing and technical review.

He has more than 10 years of work experience in CDM/GS4GG/VCS project assessment and technical review with Applus+.

Before he joined Applus+ Certification (LGAI Technological Center, S.A), he has been working for Shanghai Chuanji Investment and Management which is a CDM consultancy company as a project manager for CDM project development.

Mr. Denny Xue is based in Shanghai, China.

Mr. Denny Xue may participate as part of the Technical Review experts' panel.

2.2 Document review

The Monitoring Report version 1 was submitted to VVB before the verification activities started. The MR was assessed based on all the relevant documents. The aim of the assessment in the desk review was to:

- verify the completeness of the data and the information presented in the MR;
- check the compliance of the MR with respect to the monitoring plan depicted in the registered PDD GS Passport and transition annex, verify that the applied methodology was carried out.

Particular attention to the frequency of measurements, the quality of the metering equipment including calibration requirements, and the quality assurance and quality control procedures was paid;

- evaluate the data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

A complete list of documents reviewed is available in chapter 6 of this report.

2.3 On site assessment and follow up interviews

The Verification team performed an on-site assessment on 4th of December, 2023. The PD has requested a deviation as the on-site visit was not conducted as requested by the GS rules and requirements which specifies the maximal site visit requirement of 2 years after the start of the crediting period. The deviation has been granted by the GS on 27/10/2024. The verification has to be finished no later than 31/03/2025. Please see CL 01 for further details.

The audit team has conducted several activities during on site assessment:

- A complete desk review of the MR, as well as all applicable country legal requirement and supportive evidences have been checked by the verification team.
- To check implementation, project boundary, current situation, monitoring and metering equipment, monitoring procedures, calibration etc.
- Cross-check evaluation, for information received from interviews, under the scope of all information and references provided in MR and supporting documents.
- An assessment of the implementation and operation of the GS project activity as per the registered GS PDD;
- A review of information flows for generating, aggregating and reporting the monitoring parameters;
- A check of the installed monitoring equipment (energy meters) including performance and observations of monitoring practices against the requirements of the registered GS PDD and the selected methodology;
- A review of installed equipment such as turbine and generators, including technical data of installed nameplates.
- Visit of control room to assess energy generation data and any disruption in process generation.
- Visit of project boundaries such as power house, control room, channel and any other relevant element for the project activity.
- 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.

Interviews were performed on site. The objective of the assessment is to:

- confirm the implementation and operation of the project;
- review the data flow for generating, aggregating and reporting the monitoring parameters;
- confirm the correct implementation of procedures for operations and data collection;
- cross-check the information provided in the MR documentation with other sources;
- check the monitoring equipment against the requirements of the PDD, GS Passport, Transition annex and the approved methodology, including calibrations, maintenance, etc.;
- review the calculations and assumptions used to obtain the GHG data and ER;

- identify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters.

The following persons were interviewed during on site assessment:

Interviewed Personnel*	Function	Organization
1. Mr. Carlo Trejo	Regional Manager	ETESA
2. Ms. Jackzeliz Gomez	Community member	Vista Hermosa community
3. Mr. Demetrio Guerrero	Plant Operator	Panasolar Generation S.A.
4. Mr. Raul Jaen	Environmental Engineer	Panasolar Generation S.A.
5. Mr. Rafael Rodas	Electricity Operator	ETESA
6. Mr. Elizabeth Lopez	Director	Erick del Valle school
7. Mr. Anel Saenz	Plant Administrator	ETESA
8. Ms. Jovana Cumbreira	Water Committee President	Vista Hermosa community
9. Mr. Dimas Aranda	Social Development Committee	Vista Hermosa community
10 Mr. Ramon Cedeño	Plant Operator	Panasolar Generation S.A.
11. Mr. Demetrio Guerrero	Plant Operator	Panasolar Generation S.A.
12. Mr. Daniel Ortiz	Security Guard	Americas Security
13. Mr. Edwin Perez	Municipality Engineer	Vista Hermosa Municipality
14. Mr. Maximino Tuñon	Municipality Engineer	Vista Hermosa Municipality
15. Mr. Enrico Desiata	General Manager	Panasolar Generation S.A.
16. Ms. Francesca Rocca	Administrative Manager	Panasolar Generation S.A.
17. Mr. Christian Giles	Consultant	Anaconda Carbon
18. Mr. Tony Cocho	Maintenance	Panasolar Generation S.A.
19. Mr. Cesar Pimentel	Maintenance	Panasolar Generation S.A.
20. Ms. Paola Larios	Consultant	Anaconda Carbon
21. Ms. Cindy Ureña	Consultant	Anaconda Carbon

** The respective personnel whose names are mentioned above have provided their consent for publishing their names in this document.*

2.4 Quality of evidences

Sufficient evidence covering the full verification period in the required frequency is available to verify the figures stated in the final MR. The source of the evidences will be discussed in section 3 of this report. Specific cross-checks have been done in cases that further sources were available. The monitoring report's figures were checked by the assessment team against the raw data. The data collection system meets the requirements of the monitoring plan as per the methodology.

2.5 Reporting of findings

As an outcome of the verification process, the assessment team can raise different types of findings.

Where a non-conformance arises the assessment team shall raise a Corrective Action Request (CAR). A CAR is issued, where:

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

The assessment team shall raise a Clarification Request (CR) if information is insufficient or not clear enough to determine whether the applicable GS requirements have been met.

All CARs and CRs raised during verification shall be resolved prior to submitting a request for issuance.

Forward Action Requests (FARs) may be raised during verification for actions where the monitoring and reporting require attention and/or adjustment for the next verification period.

All CARs, CRs and FARs for this verification period are included in section 6 of the report.

2.6 Internal Quality Control

As the final step of verification, the final documentation including the verification report and the protocol have to undergo an internal quality control by the independent technical review committee. Details of the Technical Reviewer(s) are provided within this Report in Section 2.1 for further references of knowledge and capability to conduct the quality checking.

After the Technical Review process, the final documentation may undergo a final quality checking process called Administrative Review, done by the Applus+ Certification's Project Manager and/or Technical Support.

Once approved by the Technical Review Team/Administrative Review Team, each report has to be finally approved by the authorized personnel of the VVB (either the Technical Manager or other authority in case the Technical Manager is part of the Validation and/or Verification-Certification (VVC) Team for the project).

In case any of the persons performing this final internal quality-control and approval process has acted as a part of the Assessment Team or Technical Review team, the approval can only be given by VVB's personnel who are not part of those teams.

After confirmation of the PP, the verification opinion and relevant documents are submitted to the GS Registry.

3. **VERIFICATION FINDINGS**

In the following sections, the results of the verification are stated. The verification results related to the project performance as documented and described in the registered PDD GS Passport transition annex, and Monitoring Report. The verification findings for each verification subject are presented below.

3.1 **FARs from Validation / Previous Verification**

After checking the validation report, it has been identified that no FARs have been raised during the project registration. Please Refer to Table 1 in section 6.

3.2 **Project Implementation in accordance with the registered Project Design Document**

The project activity was fully implemented according to the description presented in the registered PDD and GS Passport. The assessment team confirms, through the on-site assessment that all physical features of the proposed project activity including data collecting systems and storage have been implemented in accordance with the registered PDD.

The technical features of the equipment have been verified by the assessment team during on site visit by checking nameplate of main equipment which is detailed listed below:

Parameter	Value
Total project capacity	9.9 MW AC
	12.09 MW DC
Type	Photovoltaic modules
Estimated annual generation	19,192 MWh
Plant Load Factor	22.33%
Substation to be connected	34.5 KV
Lifetime [yrs]	25

The project activity was in normal operational during the monitoring period and the same has been confirmed during site visit interviews.

The Plant load factor and estimated annual generation has been checked directly from the project design documents^{20/}. No discrepancies were identified.

No unusual activities observed during the monitoring period and plant was undergone scheduled as well as maintenance as per the recommendation of the manufacturers. Applus+ Certification confirms that none of the data affects the additionality, scale or applicability of the project. Regarding the coordinates, those have been updated as in the PD, another country has been included instead. CAR 01 has been raised and the PP has requested to the GS to update them as per required process. No further discrepancies were identified.

The amount of GS-VERs achieved during the present monitoring period are lower than the estimated value in the PDD. Thus, no further justification has been requested.

During the onsite visit, the verification team confirmed that community representatives are always allowed to contact the Plant Administrator. Furthermore, there are different grievance mechanisms in place such grievance book or the grievance mailbox which is physically installed at the local church. By checking grievance records at site & submitted by PP, it was able to confirm

there are no comments received from any employee for the present monitoring period towards project activity. This has been cross checked through interviews during on site visit.

Regarding double counting, confirmation has been included in the MR. No discrepancies were identified. Finally, the VT research any similar project in the main GHG VCM programs^{/29/}. No discrepancies were identified.

Furthermore, it has been checked for Article 6.2 agreements or Memorandum of Understanding (MoU) in place with governments. There is no MoU in place right now with any country The official article 6 pipeline^{/30/} (last updated 14-04-2025) has been checked. No discrepancies were identified.

Finally, it can also be confirmed that there is no national carbon policy or carbon market in place in Panama. This has been cross checked against publicly available information^{/31/}. No discrepancies were identified.

It can be confirmed the project is not registered in any other VCM Program, national registry nor article 6.2 agreement.

Regarding the obligation to submit the annual reports and according to requirements 5.1.39 of Principles and Requirements of GS, annual reports are mandatory for which verification is not completed. According to the PP, the Design Review was approved on October 15, 2023. Immediately after this approval, a contract was signed with the VBB to start the monitoring process, which covers from the start of the project until November 2024. The VT has checked this information and concluded as correct. No discrepancies were identified.

3.3 Deviations reported during the monitoring period

1) Deviation #1 (DEV_795) approved 27/10/2024:

The PD has requested a deviation which was approved on 27/10/2024. The result of the GS decision is as follow:

"The challenges faced by PD in receiving responses from ERM, and communication issues were taken into consideration, which were beyond the control of the PD. In case of the VVB ERM not getting re-approval, PD shall contract another approved WB. In order to maintain the project's compliance with GS timelines, PD shall note that the verification process shall be completed by 31 March 2025, with no further extension".

Which is based on this description of the PP:

"We request that the process of verification of the Panasolar Photovoltaic Project (GS ID 3556) be accepted even though the timeframe has passed the 2 years since the date of the Design Certificate".

It is Verification team opinion that the deviation has been requested exactly due to the delay in performing the verification within 2 years due to circumstances beyond the control of the PD.

According to paragraph 5.1.29 of the Principle and Requirements:

5.1.29 | Verification must occur at least once during the five-year Certification cycle with the first Verification completed within two years of project Implementation Date or Design Certification, whichever is later. The Project implementation date is defined as the date at which physical activity first becomes operational, for example, the commencement of energy generation or start of distribution of household technology.

This means the deviation request actually mentions both conditions:

- the minimum frequency of verification during a five-year certification cycle, and
- the first verification shall be completed within 2 years of project implementation.

Hence, the deviation was approved because the project did not verify it within 2 years from implementation. This means the GS is recognizing that circumstances occurred outside the control of the PP to perform the verification on time.

2) Change in the start date of the crediting period from 01/06/2018 to 04/11/2019:

A Completeness check was received from the GS on 07/03/2025:

We would like to inform you that your Performance Request for GS3556 is incomplete and has not passed the Completeness Check due to the incompliance with para 5.1.37 of the Principles & Requirements (P&R), retroactive period eligible for performance certification.

As per Dev_795 (27/10/24), the decision is only against the applicable standard requirement quoted in the request form (i.e. para 5.1.29 of the P&R). The PD shall revise the monitoring report in line with the relevant requirement, and the VVB shall verify if the duration of the monitoring period has been correctly calculated.

Based on the above, the VT has evaluated the following:

Considering paragraph 10.2.1 of the GS GHG Emissions Reduction & Sequestration Product Requirements:

The start date of crediting period is the date of start of operation or a maximum of two years prior to the date of Project Design Certification, whichever occurs later.

Then, according to the registered PDD, the date of commissioning was 31/08/2018 but the date of start of the crediting period is 01/06/2018 which is contradictory. Furthermore, according to the validation report from ERM CVS, the date of commissioning was 04/07/2019. Moreover, the start date of the crediting period according to the GS web site is 01/06/2018 which is aligned with the PDD. There is no justification in the PDD why it has been established the date of 01/06/2018 as start date of crediting period. Hence, the start date of the crediting period shall be reviewed and clearly establish.

The PP has provided the record of start of operation of Panasolar Generation which is the date when the project was officially connected to the national grid on 11/05/2019. This shall be the actual date of start of operation of the project.

Bringing back what is described in the GHG Emissions Reduction & Sequestration Product Requirements, *the start date of crediting period is the date of start of operation (11/05/2019) or a maximum of two years prior to the date of Project Design Certification (04/11/2019), whichever occurs later.*

The above means the start date could be maximum of two years prior to the date of Project Design Certification (04/11/2019). This does not mean that it must be mandatory, but it could be voluntary selected up to 2 years.

The PP has decided not to claim the maximum time of two years. Hence, the date of Design Certification (04/11/2019) which is on a later date than the date of start of operation (11/05/2019) shall be established as start date of crediting period.

Concluding, the start date of the crediting period shall be actually 04/11/2019 instead of 01/06/2018 as stated in the GS web site.

Hence, a change to the start date of the crediting period is required through what is specified in the Design Change Request Requirements and Procedures.

According to Design Change Request Requirements and Procedures in its paragraph 3.3 changes to the start date of the crediting period:

The following changes to the start date of the design certified crediting period may be requested:

- a. Bringing forward the crediting period start date up to one year earlier than that indicated in the design certified PDD, taking into account that the start date shall not be earlier than two years from date of design certification and/or start date of the project, whichever occurs later;*
- b. In case the revised start date of the crediting period is after the date of Project Design Certification, a certified project activity is not required to request approval for the changes summarised in the Table 1 below, but shall notify VVB at the time next certification event, as applicable*
- c. In case the revised start date of the crediting period is before the date of Project Design Certification, a certified project activity is required to request approval for the changes summarised in the Table 1 below*
- d. A design certified Land Use & Forestry (LUF) project activity, such as Afforestation/Reforestation (A/R), may not request any changes to the start date of the crediting period if the existing start date of the crediting period was prior to the date of design certification.*

The relevant dates are as follow:

- Start date according to PD: 01/06/2018
- Actual start date according to the Design Certification: 04/11/2019

As the change in the start date is the same as the design certification date, option C might be applicable:

In case the revised start date of the crediting period is before the date of Project Design Certification, a certified project activity is required to request approval for the changes summarised in the Table 1 below.

Then, according to table 1 Requirements for change from design certified crediting period (CP) start date:

Up to one year, no Justification and/or approval is required.

Hence, it is VT conclusion of the change in the start date of the crediting period from 01/06/2018 to 04/11/2019 is not required to be approved by the GS but just informed in the MR and Verification report.

3) Deviation #2 (DEV_RQ-170) approved 31/07/2025:

A deviation has been requested by the PD on 30/06/2025 regarding the fulfillment of the maximal site visit requirement of 2 years after the start of the crediting period, according to the official document from GS "Applicability of Minimum Site Visit Requirements by VVB" (publication day 16/08/2021), paragraph 2.2.2 and 2.2.4.

The deviation was approved on 31/07/2025 and the result of the GS decision is as follow:

"In light of review of the justification provided by project developer and based on the grounds previously accepted in Deviation DEV_795, it is recognized that the delay was caused by extraordinary circumstances beyond the control of the Project Developer thus in line with Paragraph 2.2.2 (ii) of VVB requirements, the request is approved and the project is eligible to postpone the effective start date by up to two years.

Furthermore, the decision also considers directions for both, the PD and the VVB:

Directions for the project developer:

1. Developer may proceed with the verification and performance review for the monitoring period from 04/11/2019 to 30/11/2023, as approved under this deviation.

The MR has been checked and the Monitoring Period is aligned with this direction. No discrepancies were identified.

2. Developer must ensure that all supporting documentation, including baseline conditions and monitoring data, are transparently presented and substantiated in the upcoming verification.

The VT has raised a FAR for this purpose. Please refer to section 8 of this report.

3. Developer shall maintain coordination with the VVB (Applus+) to ensure timely completion of the verification and issuance process, as no further extension will be granted.

The VT is in coordination with the PD to submit the project documents on time and without further delay.

Directions for the VVB:

1. The VVB shall validate and document that no material changes occurred to the baseline scenario between the original crediting start and the actual site visit.

The VT attended site visit and perform several interviews to confirm that the defined baseline scenario is still valid. In the absence of the project activity, the energy would be generated by the result of the energy matrix of the host country which is still comprise by fossil fuel power plants. Hence, it can be confirmed that no material changes occurred to the baseline scenario due to the changes in the crediting start date. At the time of on-site visit, the baseline scenario remains the same as defined during the validation.

2. The VVB shall proceed with the verification of the full monitoring period, applying conservative assumptions where appropriate and consistent with GS rules.

Conservative assumptions have been always applied during the execution of the current verification and aligned with all applicable rules and requirements from the GS. No errors, miscalculations, omissions, misstatements, or incomplete information have been identified.

3. The VVB must include explicit reference to this deviation approval in the Verification Report.

Information about Deviation number DEVRQ-170 and approved on 31/07/2025 has been considered in this verification report.

3.4 Completeness of Monitoring

The monitoring plan is in accordance with the approved methodology AMS-I.D. version 18, applied by the proposed GS project activity. No deviation, correction or permanent change to the monitoring plan has been requested

Parameter not monitored:

There are no parameters defined as fixed neither in the registered PDD or the transition annex. Applus+ Certification has verified the registered PDD and the approved transition annex. No discrepancies were identified in the MR.

Parameter monitored:

According to the registered PDD and the approved transition annex, there are parameters to be monitored related to the calculation of the emission factor and the quantity of electricity supplied by the project activity to the grid:

Relevant SDG Indicator	SDG 7 – Affordable and Clean Energy
Data/parameter:	EF _{grid,CM,y}
Unit	tCO ₂ /MWh
Description	Combined margin CO ₂ emission factor for the electricity system in year y
Measured/calculated/default	Calculated
Source of data	Calculated ex-post and during each verification As per official statistics from CND (National Dispatch Center) from each year from 2017 to 2023 - https://www.cnd.com.pa/index.php/informes/categoria/informes-de-mercado?tipo=88&anio=2020 .

	And from: CND_ESTADISTICAS_Capacidad_Instalada.pdf , available at: https://sitioprivado.cnd.com.pa/Estadistica/Download/11?key=VXd9e23Z9JRA5aIUR21R-P8gocoGOMqdvSo79FduN												
Value(s) of monitored parameter	<table border="1"> <thead> <tr> <th>Year</th><th>tCO₂e/MWh</th></tr> </thead> <tbody> <tr> <td>2019</td><td>0.5221</td></tr> <tr> <td>2020</td><td>0.4858</td></tr> <tr> <td>2021</td><td>0.4293</td></tr> <tr> <td>2022</td><td>0.4185</td></tr> <tr> <td>2023</td><td>0.4281</td></tr> </tbody> </table>	Year	tCO ₂ e/MWh	2019	0.5221	2020	0.4858	2021	0.4293	2022	0.4185	2023	0.4281
Year	tCO ₂ e/MWh												
2019	0.5221												
2020	0.4858												
2021	0.4293												
2022	0.4185												
2023	0.4281												
Monitoring equipment	Not applicable												
Measuring/reading/recording frequency:	Calculated ex-post and during each verification												
Calculation method (if applicable):	According to Tool to calculate the emission factor for an electricity system. As per equation (16) of the TOOL07: $EF_{grid,CM,y} = EF_{grid,OM,y} \times WOM + EF_{grid,BM,y} \times WBM$ WOM=0.75 WBM=0.25 The values for each year are the following: 2019 = 0.5639*0.75 + 0.3967*0.25 = 0.5221 2020 = 0.5284*0.75 + 0.3580*0.25 = 0.4858 2021 = 0.4585*0.75 + 0.3416*0.25 = 0.4293 2022 = 0.4436*0.75 + 0.3434*0.25 = 0.4185 2023 = 0.4401*0.75 + 0.3919*0.25 = 0.4281 The formulas and data from the following excel sheets were reviewed: - EF Panasolar 2020 (3) - EF Panasolar 2021 (2) - EF Panasolar 2022 (2) - EF Panasolar 2023 (2) - EF Panasolar 2019 (1) The "GEN" sheet which is the input for the "OM" and "BM" sheets was crosschecked with the data from National Dispatch Center for each of the years from 2017 to 2023. NO discrepancies were found. Also, the start of operations of the plants stated in the BM was based in CND official file "CND_ESTADISTICAS_Capacidad_Instalada" (publicly availabl) which was also crosschecked, confirmed and found correct.												
QA/QC procedures:	Not applicable												
Purpose of data:	Baseline emissions												

Additional comments:	This parameter will be used ex-post during each verification.
Means of verification:	The VT has checked the calculation of the emission factor against: - The tool to calculate the emission factor for an electricity system. - The registered PDD. - The approved transition annex. - Evidence to support the calculation of the EF - Interviewing the project developer and consultant By reviewing the information stated above, it can be concluded that the calculation of the EF has been correctly done and aligned with the provisions of the applicable requirements. No discrepancies were identified.

Relevant SDG Indicator	SDG 7 – Affordable and Clean Energy																	
Data/parameter:	EG _{facility,y}																	
Unit	MWh																	
Description	Quantity of net electricity generation supplied by the project activity to the grid																	
Measured/calculated/default	Measured																	
Source of data	Electricity Meter																	
Value(s) of monitored parameter	<table><tr><th>Year</th><th>MWh</th></tr><tr><td>04/11/2019 to 31/12/2019</td><td>2,260.62 MWh</td></tr><tr><td>01/01/2020 to 31/12/2020</td><td>14,104.84 MWh</td></tr><tr><td>01/01/2021 to 31/12/2021</td><td>14,796.43 MWh</td></tr><tr><td>01/01/2022 to 31/12/2022</td><td>14,122.27 MWh</td></tr><tr><td>01/01/2023 to 30/11/2023</td><td>14,732.52 MWh</td></tr><tr><td>TOTAL</td><td>64,970.28</td></tr></table>			Year	MWh	04/11/2019 to 31/12/2019	2,260.62 MWh	01/01/2020 to 31/12/2020	14,104.84 MWh	01/01/2021 to 31/12/2021	14,796.43 MWh	01/01/2022 to 31/12/2022	14,122.27 MWh	01/01/2023 to 30/11/2023	14,732.52 MWh	TOTAL	64,970.28	
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TOTAL	64,970.28																	
Monitoring equipment	Electricity meters: <table><tr><th>ID</th><th>Meter #1</th><th>Meter #2</th></tr><tr><td>Brand & Model</td><td>SEL-735</td><td>SEL-735</td></tr><tr><td>Serial Number</td><td>3190140043</td><td>3190140044</td></tr><tr><td>Accuracy Class</td><td>0.1</td><td>0.1</td></tr><tr><td>Type</td><td>Bidirectional</td><td>Bidirectional</td></tr></table> The monitoring equipment is aligned with the description in the registered PDD and approved transition annex.			ID	Meter #1	Meter #2	Brand & Model	SEL-735	SEL-735	Serial Number	3190140043	3190140044	Accuracy Class	0.1	0.1	Type	Bidirectional	Bidirectional
ID	Meter #1	Meter #2																
Brand & Model	SEL-735	SEL-735																
Serial Number	3190140043	3190140044																
Accuracy Class	0.1	0.1																
Type	Bidirectional	Bidirectional																
Measuring/reading/recording frequency:	Measured continuously and recorded monthly																	
Calculation method (if applicable):	Not applicable as the parameter is measured.																	

QA/QC procedures:

Monitoring equipment are tested and maintained in accordance with the relevant technical codes. The calibration of the meters is shown below:

ID	Meter #1	Meter #2
Brand & Model	SEL-735	SEL-735
Serial Number	3190140043	3190140044
Accuracy Class	0.1	0.1
Type	Bidirectional	Bidirectional
Calibration frequency	Annually	Annually
Calibration gap: from / to	14/05/2019 17/05/2019	14/05/2019 17/05/2019
Calibration date: from / to	17/05/2019 16/05/2020	17/05/2019 16/05/2020
Calibration gap: from / to	16/05/2020 21/08/2020	16/05/2020 21/08/2020
Calibration date: from / to	21/08/2020 20/08/2021	21/08/2020 20/08/2021
Calibration gap: from / to	20/08/2021 11/03/2022	20/08/2021 11/03/2022
Calibration date: from / to	11/03/2022 10/03/2023	11/03/2022 10/03/2023
Calibration gap: from / to	10/03/2023 24/03/2023	10/03/2023 24/03/2023
Calibration date: from / to	24/03/2023 23/03/2024	24/03/2023 23/03/2024

Calibration:

Calibration frequency is determined by the SMEC (Metodología para la Verificación del Sistema de Medición Comercial) done by the CND (Centro Nacional de Despacho) established in statement MVS.6.2.7 (page 3) that the equipment must be calibrated annually.

The calibration was checked through the calibration certificates which are duly signed by the Dispatch National Center. The testing and calibration were performed according to national regulation mentioned above. No discrepancies were identified.

Based on the assessment and information as per table above, calibration gap's have been identified. The PP has applied the maximum permissible error of the instrument to the measured values taken during the period between the scheduled date of calibration and the actual date of calibration.

From the related calibration certificates and emission reduction calculation the verification team confirms that the maximum permissible error has been applied in a conservative manner so that the adjusted measured values due to the delayed calibration result in fewer claimed emission reductions.

Accuracy class:

According to the registered PDD and the approved transition annex, the meters will conform to the accuracy class of 0.1 (maximal error of 0.025%). The on-site installed equipment was checked to confirm it. No discrepancies were identified. Although in the registered PDD the accuracy class mentioned is of 0.2, the actual class is superior which is considered adequate by the VT.

The accuracy class has been verified through the review of the SEL 735 Data Sheet^{20/}: SEL-735 Power Quality and Revenue Meter, issued by Schweitzer Engineering Laboratories, Inc (Date code 20240306). It is referenced in page 5, the maximum error of 0.025%.

	Cross check procedure: According to the registered PDD and the approved transition annex, cross check with review of the receipts of electricity sales. The electricity invoices have been provided and the CND Reports. No discrepancies were identified. All provisions described in the monitoring plan of the registered PDD and approved transition annex have been followed. No discrepancies were identified.
Purpose of data:	Baseline emissions.
Additional comments:	The verification of parameter $EG_{\text{facility},y}$ was conducted to ensure conservativeness, specifically: - The VT review the energy meter readings (raw data), the DTE Report (issued by the Dispatch National Center - CND) and the Energy invoices (issued by Panasolar) and compared with the values used in the ER calculation spread sheet. When a discrepancy was identified, the corresponding finding have been raised. This was done during on site assessment in conjunction with the PD. - The selection of these documents is required by the applied methodology and considered in the registered PD. This ensures conservative estimation of emission reductions as the actual energy generation and consumption is being used for monitoring th respective parameter. - The following evidence were provided by the PD and reviewed by the VVB to support the verification approach: - Energy meter readings (raw data); - DTE Report issued by the Dispatch National Center (CND) - Energy invoices issued by Panasolar. - For data of November 2019, the PD has used only data for the corresponding period (From 04/11/2019 to 30/11/2019) which is easily extracted from the energy meter readings (raw data) and the DTE Reports as hourly data is reported.
Means of verification:	The above have been verified through the following means: - Inspection of the meters through on-site assessment. - Interviewing the staff of the power plant. - Review of calibration certificates of energy meters. - Review of electricity invoices. By reviewing the information stated above, it can be concluded that the monitoring of the parameter has been correctly done and aligned with the provisions of the applicable requirements. No discrepancies were identified.

Monitored system:

The defined monitored system in the registered PDD and the approved transition annex has been correctly implemented by the project activity. This has been clearly included in section C of the MR. No discrepancies were identified.

3.5 SDG Outcomes Monitoring

In the Registered Passport and Gold Standard for the Global Goals Transition Annex, 8 data/parameters are chosen for the monitoring of SDG:

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

No.	1																											
Relevant SDG Indicator	SDG 8 – Decent work and Economic Growth																											
Indicator	Quantity of employment and income generation																											
Data/parameter:	- Number of jobs created in the operation of the project - Salary levels. - Proportion locally hired employees.																											
Unit	Not applicable																											
Description	- Number of jobs created in the operation of the project - Salary levels. - Proportion locally hired employees.																											
Measured/calculated/default	Calculated																											
Source of data	- List of job created - Payroll information of employees / Contracts with workers - Number of employees in skilled jobs, proportion of locally hired employees and number of training sessions																											
Value(s) of monitored parameter	<table><tr><th>Year</th><th>Jobs created</th><th>Payroll above minimum wage</th><th>Locally hired employees</th></tr><tr><td>2019</td><td>12</td><td>100%</td><td>100%</td></tr><tr><td>2020</td><td>12</td><td>100%</td><td>100%</td></tr><tr><td>2021</td><td>12</td><td>100%</td><td>100%</td></tr><tr><td>2022</td><td>12</td><td>100%</td><td>100%</td></tr><tr><td>2023</td><td>12</td><td>100%</td><td>100%</td></tr></table>				Year	Jobs created	Payroll above minimum wage	Locally hired employees	2019	12	100%	100%	2020	12	100%	100%	2021	12	100%	100%	2022	12	100%	100%	2023	12	100%	100%
Year	Jobs created	Payroll above minimum wage	Locally hired employees																									
2019	12	100%	100%																									
2020	12	100%	100%																									
2021	12	100%	100%																									
2022	12	100%	100%																									
2023	12	100%	100%																									
Monitoring equipment	Not applicable																											
Measuring/reading/recording frequency:	Monthly																											
Calculation method (if applicable):	Not applicable																											
QA/QC procedures:	Interview with operation worker staffs has been carried out to cross check the evidence provided.																											
Purpose of data:	SDG claim																											
Additional comments:	Not applicable																											

Means of verification:	By checking the information mentioned above as well as interviews with worker staffs, it is able to confirm that jobs have been created in the operation of the project. Furthermore, the proportion of locally hired employees is 100%. Furthermore, the salary levels have been also checked to confirm that all employees' salaries are above the minimum salary. The minimum salary in Panama has been checked here: https://www.mitradel.gob.pa/el-salario-minimo-en-panama/ https://www.ey.com/es_cr/tax/tax-alerts/panama-salario-minimo#:~:text=Nuevas%20tasas%20de%20Salario%20M%C3%ADnimo,promedio%20ser%C3%A1%20de%20US\$24636.80. Interviews were also performed to cross check all information assessed. No discrepancies were identified when monitoring this parameter.
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No.	2																								
Relevant SDG Indicator	SDG 8 – Decent work and Economic Growth																								
Indicator	Quantity of employment																								
Data/parameter:	- Payroll information of employees and how it compares to minimum wage in Panama. - Number of events that have training staff regarding safe and healthy working conditions or other technical project implementation aspects. - Provision of adequate personal protective equipment (PPE).																								
Unit	Not applicable																								
Description	- Payroll information of employees and how it compares to minimum wage in Panama. - Number of events that have training staff regarding safe and healthy working conditions or other technical project implementation aspects. - Provision of adequate personal protective equipment (PPE).																								
Measured/calculated/default	Calculated																								
Source of data	- Payroll information of employees / Contracts with workers. - Source of minimum salary in Panama. - Training regarding safe and healthy working conditions or other technical project implementation aspects. - Purchase records of personal protective equipment (PPE).																								
Value(s) of monitored parameter	<table><tr><th>Year</th><th>Payroll above minimum wage</th><th>Training events</th><th>PPE provision</th></tr><tr><td>2019</td><td>100%</td><td>2</td><td>100%</td></tr><tr><td>2020</td><td>100%</td><td>2</td><td>100%</td></tr><tr><td>2021</td><td>100%</td><td>2</td><td>100%</td></tr><tr><td>2022</td><td>100%</td><td>2</td><td>100%</td></tr><tr><td>2023</td><td>100%</td><td>2</td><td>100%</td></tr></table>	Year	Payroll above minimum wage	Training events	PPE provision	2019	100%	2	100%	2020	100%	2	100%	2021	100%	2	100%	2022	100%	2	100%	2023	100%	2	100%
Year	Payroll above minimum wage	Training events	PPE provision																						
2019	100%	2	100%																						
2020	100%	2	100%																						
2021	100%	2	100%																						
2022	100%	2	100%																						
2023	100%	2	100%																						

Monitoring equipment	Not applicable
Measuring/reading/recording frequency:	Annually
Calculation method (if applicable):	Not applicable
QA/QC procedures:	Interview with operation worker staffs has been carried out to cross check the evidence provided.
Purpose of data:	SDG claim
Additional comments:	Not applicable
Means of verification:	By checking the information mentioned above as well as interviews with worker staffs, it is able to confirm that jobs are paid above the minimum wage in Panama. Furthermore, it can be also confirmed that training activities have been performed related to safe and healthy working conditions and other technical project implementation aspects. Moreover, during on site assessment, it was observed that all employees are using adequate personal protective equipment (PPE). Records of purchase of such equipment has been also provided. Interviews were also performed to cross check all information assessed. No discrepancies were identified when monitoring this parameter.

No.	3																
Relevant SDG Indicator	SDG 8 – Decent work and Economic Growth																
Indicator	Human and institutional capacity:																
Data/parameter:	- Number of employees in skilled jobs, - Proportion of locally hired employees (people that live in the same town) - Number of training sessions																
Unit	Not applicable																
Description	- Number of employees in skilled jobs, - Proportion of locally hired employees (people that live in the same town) - Number of training sessions																
Measured/calculated/default	Calculated																
Source of data	- List of employees in skilled jobs, - List of proportion of locally hired employees - Number of training sessions																
Value(s) of monitored parameter	<table><tr><th>Year</th><th>Employees in skilled jobs</th><th>Locally hired employees</th><th>Trainings</th></tr><tr><td>2019</td><td>12</td><td>100%</td><td>2</td></tr><tr><td>2020</td><td>12</td><td>100%</td><td>2</td></tr><tr><td>2021</td><td>12</td><td>100%</td><td>2</td></tr></table>	Year	Employees in skilled jobs	Locally hired employees	Trainings	2019	12	100%	2	2020	12	100%	2	2021	12	100%	2
Year	Employees in skilled jobs	Locally hired employees	Trainings														
2019	12	100%	2														
2020	12	100%	2														
2021	12	100%	2														

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	<table><tr><td>2022</td><td>12</td><td>100%</td><td>2</td></tr><tr><td>2023</td><td>12</td><td>100%</td><td>2</td></tr></table>	2022	12	100%	2	2023	12	100%	2
2022	12	100%	2						
2023	12	100%	2						
Monitoring equipment	Not applicable								
Measuring/reading/recording frequency:	Annually								
Calculation method (if applicable):	Not applicable								
QA/QC procedures:	Interview with operation worker staffs has been carried out to cross check the evidence provided.								
Purpose of data:	SDG claim								
Additional comments:	Not applicable								
Means of verification:	By checking the information mentioned above as well as interviews with worker staffs, it is able to confirm that there is availability of employees in skilled jobs. Furthermore, the proportion of locally hired employees (people that live in the same town) is 100% Moreover, it can be also confirmed that several training sessions have been given. Interviews were also performed to cross check all information assessed. No discrepancies were identified when monitoring this parameter.								

No.	4
Relevant SDG Indicator	SDG 8 – Decent work and Economic Growth
Indicator	Livelihood of the poor
Data/parameter:	Operation of tank in the local community
Unit	Not applicable
Description	Operation of tank in the local community
Measured/calculated/default	Calculated
Source of data	- Record of operation of tank in the local community
Value(s) of monitored parameter	N/A
Monitoring equipment	Not applicable
Measuring/reading/recording frequency:	Monthly
Calculation method (if applicable):	Not applicable
QA/QC procedures:	Interview with community members has been carried out to cross check the evidence provided.
Purpose of data:	SDG claim
Additional comments:	The PD has declared that approximately 80 houses are connected to the tank. This has been verified during on site visit to the tank and interviewing several people of the community. It is difficult to quantify the total amount of houses as no official information is available but this has been confirmed

	during on site visit when interviewing the several people of the community and local authorities as well (section 2.3 of this report).
Means of verification:	By checking the information mentioned above as well as interviews with community members, it is able to confirm that water tank has been operating without brakes and the community has available water. Interviews were also performed with project staff to cross check all information assessed. No discrepancies were identified when monitoring this parameter.

In Summary, it is Applus+ Certification's opinion that the monitoring of the project owner regarding to sustainability is in line with requirement of the GS4GG Version 2.0.

3.6 Assessment of Safeguard Principles

The following safeguard principals have been assessed:

Safeguarding principles	Description of relevance	Risk	Mitigation measure	OVV Assessment
1. The project respects internationally proclaimed human rights including dignity, cultural property and uniqueness of indigenous people. The project is not complicit in Human Rights abuses.	The Project activity is not in conflict with the livelihood of the local communities and does not cause any human rights abuse.	Low	N/A	The project does not disrespect internationally proclaimed human rights or involved or complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights. This has been assessed during the whole validation process through document review (internal & external) and doing interviews during on site visit. It can be concluded the project will ensure compliance with the safeguard principle.
2. The project does not involve and is not complicit in involuntary resettlement	There has been no resettlement as the area was previously uninhabited and it is a private land which was utilized for cattle grazing.	Low	N/A	The project does not involve and is not complicit in involuntary resettlement. This has been assessed during the whole validation process through document review (internal & external) and doing interviews during on site visit. It can be concluded the project will ensure compliance with the safeguard principle.
3. The project does not involve and is not complicit in the alteration, damage or removal of any critical cultural heritage	There are no archaeological sites on the project site or the surrounding area according to the Archaeological Monitoring permit	Low	N/A	The project is not involved in altering, damaging, or removing sites, objects, or structures of significant cultural heritage. This has been assessed during the whole validation process through document review (internal &

	given to PANASOLAR from INAC			external) and doing interviews during on site visit. It can be concluded the project will ensure compliance with the safeguard principle.
4. The project respects the employees' freedom of association and their right to collective bargaining and is not complicit in restrictions of these freedoms and rights	The project owner respects the employees' freedom of association and their right to collective bargaining	Low	N/A	The respects the employees' freedom of association and their right to collective bargaining and is not complicit in restrictions of these freedoms and rights. This has been assessed during the whole validation process through document review (internal & external) and doing interviews during on site visit. It can be concluded the project will ensure compliance with the safeguard principle.
5. The project does not involve and is not complicit in any form of forced or compulsory	No forced or compulsory labor is involved in the project. The project activity strictly complies with all laws of other Republic of Panama	Low	N/A	The does not involve and is not complicit in any form of forced or compulsory. This has been assessed during the whole validation process through document review (internal & external) and doing interviews during on site visit. It can be concluded the project will ensure compliance with the safeguard principle.
6. The project does not employ and is not complicit in any form of child labor	No child labor is involved in the project, in accordance to Panamanian labor laws.	Low	N/A	The project does not employ and is not complicit in any form of child labor. This has been assessed during the whole validation process through document review (internal & external) and doing interviews during on site visit. It can be concluded the project will ensure compliance with the safeguard principle.
The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis	The Project will act in strict accordance to Panamanian labour laws and protect the rights of all staff and make sure it is involved nor complicit it in any form of discrimination based on gender, race, religion, sexual orientation or any other basis.	Low	N/A	The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis. This has been assessed during the whole validation process through document review (internal & exxternal) and doing interviews during on site visit. It can be concluded the project will ensure compliance with the safeguard principle.

8. The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments	The Project will act in strict accordance to Panamanian labor laws and the project sponsor is committed to improve people working situation and therefore looks after a healthy work environment	Medium	Proper annual trainings for all workers, and distribution and usage of protective equipment	The project does not involve potential risks to the health and safety of affected communities during its life cycle. Furthermore, training is provided on a regular basis. Information about this has been included in section F of the MR. This was cross checked during on site assessment. No discrepancies were identified. This has been assessed during the whole validation process through document review (internal & external) and doing interviews during on site visit. It can be concluded the project will ensure compliance with the safeguard principle.
9. The project takes a precautionary approach in regard to environmental challenges and is not complicit in practices contrary to the precautionary principle	Because the project activity is a new built solar PV power project, it will have a very limited impact to air, soil, water and noise pollution.	Low	The project owner is very mindful of any possible environmental impacts during construction and operation of the project. All government laws regarding environmental impact have been followed and will be followed during project execution.	The takes a precautionary approach in regard to environmental challenges and is not complicit in practices contrary to the precautionary principle. This has been assessed during the whole validation process through document review (internal & external) and doing interviews during on site visit. It can be concluded the project will ensure compliance with the safeguard principle.
10. The project does not involve and is not complicit in significant conversion or degradation of critical natural habitats, including those that are (a) legally protected, (b) officially proposed for protection, (c) identified by authoritative sources	None of the mentioned critical natural habitats are touched by the project. Before the construction phase of the project, the land on which the project is to take place is barren and unfertile and no beneficial use other	Low	N/A	The project does not involve and is not complicit in significant conversion or degradation of critical natural habitats. This has been assessed during the whole validation process through document review (internal & external) and doing interviews during on site visit. It can be concluded the project will ensure compliance with the safeguard principle.

for their high conservation value, or (d) recognized as protected by traditional local communities	than for cattle grazing.			
11. The project does not involve and is not complicit in corruption	The project activity will not promote or be complicit in corruption.	Low	The company has a clear policy regarding the rules of conduct regarding gifts and bribes and the engagement in any form corruption activities	The project is not involved, or is it complicit in, contributing to or reinforcing corruption, bribery or unethical behavior. This has been assessed during the whole validation process through document review (internal & external) and doing interviews during on site visit. It can be concluded the project will ensure compliance with the safeguard principle.

In Summary, it is Applus+ Certification's opinion that the monitoring of the safeguard principles is in line with requirement of the GS4GG Version 2.0.

No grievances have been received during the monitoring period. This has been checked against the grievance book and cross check with interviews during project site visit. No discrepancies were identified.

3.7 Assessment of Data and Calculation of Greenhouse Gas Emission Reductions

As a result of verification of the ER calculation process, the assessment team confirmed that all the parameters required for the determination of the emission reductions have been included in the last version of the Monitoring report and ER calculation spreadsheet and are consistent with the applied methodology AMS-I.D. Grid connected renewable electricity generation Ver. 18. The parameters are complete in this monitoring period.

The assessment of the calculation of the emission factor is as follow:

- The ex-post parameter $EF_{grid,CM,y}$ was calculated as per the procedures established by the Tool 07 (Section 6), and all steps and equations were checked and verified by the VVB. The ex-post parameter $EF_{grid,CM,y}$ was calculated using the default valued for wind and solar power generation project activities: for WOM (0.75) and wBM (0.25).
- Regarding the OM, the VVB checked the calculation and the selected method which was "Simple adjusted OM" which was found correct as LCMR share is higher than 50% of the total grid generation in recent 5 years, confirmed by the VVB (Datosmacro.com), and also the hourly loads of the grid were available.
- Determination of $EG_{m,y}$: The Generation of all the power plants/units in the system, was obtained from the "CND" (Centro Nacional de Despacho) in the following link for each of the years (dataset years from 2017 to 2023):

<https://www.cnd.com.pa/index.php/informes/categoria/informes-de-mercado?tipo=88&anio=>

The generation used in the excel file "EF Panasolar.xlsx", sheet "GEN" was taken directly from the official sources. These were used in the "OM" and "BM" Sheets.

The generation data in the "EF Panasolar.xlsx" for each of the years, is the following:

	2017	2018	2019	2020	2021	2022	2023
Gen total (MWh)	10,560,746.6	10,676,875.5	10,717,780.5	10,357,649.1	11,109,633.3	11,549,157.6	12,230,347.5
Gen LC/MR (MWh)	7,722,700.8	8,466,240.6	6,053,154.3	8,188,915.4	9,166,255.6	9,331,792.7	7,880,675.9
Gen no LC/MR (MWh)	2,838,045.8	2,210,634.9	4,664,626.2	2,168,733.7	1,943,377.7	2,217,364.9	4,349,671.6

d) Determination of the Emission Factor of each power unit ($FE_{EL,m,y}$):

In paragraph 49. (b) Option A2 was chosen, where the emission factor is determined based on the CO₂ emission factor of the fuel type and the efficiency of the power unit as per Equation 5 of the TOOL07.

The different fuel types values, were obtained from IPCC Guidelines for National Greenhouse Gas Inventories, Reference Manual, Volume 2 (2006), Chapter 1. Table 1.4 Lower limit of the uncertainty at a 95% confidence interval. This was Checked by the VVB and it matches the data used in "CONVERSION" and "EF" sheets of the "EF Panasolar.xlsx" calculations and no discrepancies were found.

CO ₂ Emission Factor			
Fuel	Value	Unit	Source
Coal	89,5	tCO ₂ /TJ	IPCC Guidelines for National Greenhouse Gas Inventories, Reference Manual, Volume 2 (2006), Chapter 1. Table 1.4 Lower limit of the uncertainty at a 95% confidence interval.
Natural Gas	54,3	tCO ₂ /TJ	
Fuel Oil No. 2	72,6	tCO ₂ /TJ	
Fuel Oil No. 6	75,5	tCO ₂ /TJ	
Landfill Gas	0	tCO ₂ /TJ	

The Heat rate, was taken from the Excel file "Eficiencias EF Panama.xlsx" for each year from 2017 to 2023 based on the official files "Despacho semanal" publicly available on the CND website. Annual compiled of weekly records. The values correspond to the average of all weekly efficiencies reported throughout the year. Because in each week the plants can report more than one heat rate (depending on the capacity that is call to dispatch), the maximum efficiency reported was considered in all cases (that is, lower number of Btu per KWh) for each plant for each week in order to have a single weekly data by central; finally an annual value was obtained as the simple average of all weekly heat rates available. This was checked by the VVB and found correct, no discrepancies found.

- e) The calculation of the Lambda was done as per equation 11 of the TOOL 07, by means of the Approach 2, using the step wise procedure provided in appendix 3 of the TOOL 07. No discrepancies were found. The Data was taken from sheet "HbyH" of corresponding Excel file "GenYYYY" and sorted in descending order of the years from 2017 to 2023. No discrepancies were found. Lambda is calculated as follows:

$$\lambda_y (\text{per cent}) = \text{Number of hours low-cost/must-run are on the margin in year } y$$

8760 hours per year

The values obtained were:

Lambda	Value
Lambda 2017	0.0742
Lambda 2018	0.0742
Lambda 2019	0.1805
Lambda 2020	0.0007
Lambda 2021	0.0742
Lambda 2022	0.1805
Lambda 2023	0.0007

- f) Regarding the BM: the VVB checked the sources in order to obtain the Plant's start of operation to obtain the SETsample, the following official document was used: "CND_ESTADISTICAS_Capacidad_Instalada" (CND 2023) publicly available in: <https://sitioprivado.cnd.com.pa/Estadistica/Download/11?key=VXd9e23Z9JRA5aIUR21R-P8gocoGOMqdvSo79FduN>. This document includes all plants in the system since 1984, until May 2025. This was reviewed and no discrepancies were found in the last revision delivered. Also, all CDM plants were crosschecked with the CDM official sources: <https://cdm.unfccc.int/Projects/projsearch.html>

As per TOOL07, section 6.5, Step 5, option 2 was chosen, in which the emission factor should be updated annually, ex post. The set of plants "SETsample" was determined as per the procedure in paragraph 75 of the TOOL07, as per checked by the VVB, to obtain the following data for each of the years:

	YEAR 2019	YEAR 2020	YEAR 2021	YEAR 2022	YEAR 2023
AEGSET-5-units	2,937,422.10	1,449,142.20	225,126.50	58,886.90	174,739.40
AEG_{total} Without CDM	8,248,845.10	7,349,216.60	8,045,502.60	8,256,043.40	9,425,385.50
20% of AEG_{total}	1,649,769.02	1,469,843.32	1,609,100.52	1,651,208.68	1,885,077.10
AEG_{SET-≥20%}	2,892,253.80	1,567,939.40	1,927,504.20	1,874,483.30	3,553,706.70
SET_{sample}	2,937,422.10	1,567,939.40	1,927,504.20	1,874,483.30	3,553,706.70

	YEAR 2019	YEAR 2020	YEAR 2021	YEAR 2022	YEAR 2023
Total Generation	10,717,781	10,357,649	11,109,633.30	11,549,158.60	12,230,348
Generation in BM	2,937,422.10	1,567,939.40	1,927,504.20	1,874,483.30	3,553,706.70
Total Emissiones	1,165,385	561,441	658,606	643,748	1,392,915
EF BM	0.3967	0.3580	0.3416	0.3434	0.3919

The VVB checked the "SETsample" of each of the years, crosschecked with the official document of the Installed Capacity from the CND mentioned above, and according with the generation data as per explained in paragraph b above. Furthermore, the VVB confirmed that no CDM plants were included in the calculations. The emissions (tCO₂) of each of the plants was taken from the "OM" sheet, as per its corresponding Emission Factor obtained from "EF" sheet, of the "EF Panasolar.xlsx" (for each of the years).

After verifying the reported figures with the raw data sources, it's confirmed that the values of the parameters from the raw data sources are consistent with those quoted in the last version of the Monitoring Report and ER calculation spreadsheet. It has been verified that the values applied are accurate and derived from official sources. All procedures were implemented in strict compliance with Tool 07 for the determination of the combined emission factor. The formulas were applied correctly, as evidenced and cross-checked in the Emission Factor Calculation Spreadsheets corresponding to each year. Therefore, it is confirmed that the reported CM Emission Factors for each year are consistent, properly calculated, and accurate.

Emission reductions: $ER = BE_y - PE_y - LE_y$

Baseline emissions: $BE_y = EG_{facility,y} * EF_{grid,CM,y}$

Project emissions: The project is a solar power project, no fossil fuel will be consumed according to the methodology AMS-I.D., then, according to registered PDD, $PE_y = 0 \text{ tCO}_2\text{e}$

Leakage: The project is a solar power project, no leakage is considered according to the methodology AMS-I.D., then, according to registered PDD, $LE_y = 0 \text{ tCO}_2\text{e}$.

Emission reductions: $ER = BE_y - PE_y - LE_y = 26,600 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} - 0 \text{ tCO}_2\text{e} = \mathbf{26,600 \text{ tCO}_2\text{e}}$

Emission reductions achieved during the current monitoring period:

The calculation calculation and transparently calculation of reductions. The ER spreadsheet is issuing date and	Start Dates	End Dates	GS VERs (SDG 13)	tool, i.e. the ER spreadsheet clearly describes the emission calculation indicated with the revision number.
	04/11/2019	31/12/2019	1,180 tCO ₂ e	
	01/01/2020	31/12/2020	6,852 tCO ₂ e	
	01/01/2021	31/12/2021	6,352 tCO ₂ e	
	01/01/2022	31/12/2022	5,910 tCO ₂ e	
	01/01/2023	30/11/2023	6,306 tCO ₂ e	
TOTAL			26,600 tCO ₂ e	

The assessment team re-produced the calculation process and confirmed that the methods and formulae used to obtain the baseline, project and leakage emissions are appropriate. The calculation has been done in accordance with the methods and formulae described in the registered monitoring plan and applicable methodology.

The reported data have been cross-checked against other sources available as explained above in section 3.4 of the report.

The assessment team confirms that all the assumptions, emission factors and default values (ex-ante values) from PDD have been correctly justified. All the emission factors and default values are explicitly mentioned in the monitoring report.

Comparison of actual SDGs Impacts with estimates in approved PDD are shown as follow:

SDG	PDD values (ex ante)	MR values (ex-post)
13	41,994 tCO ₂ e	26,600 tCO ₂ e
7	79,990.64 MWh	60,016.69 MWh
8	07 jobs	12 jobs
8	Not described	2 trainings per year

The verification team has checked the PDD and compared with the MR. The values obtained in the current monitoring period are lower than the values stated in the registered PDD with respect to SDG 13 and SDG 7. The SDG 8 remains the same. Hence, this is acceptable in the context of the project activity.

The verification team confirms that:

- According to the applied methodology, the conservativeness of the achieved emission reduction was checked, and the detailed emission reduction calculation has been transparently provided in the ER sheet.
- All the formulae and the calculation procedure were checked by the verification team.
- In the opinion of verification team, the assumptions, emission factors and default values that were applied in the calculations have been justified. Also, the verification team confirms that there were no manual transposition errors between the data sets in the ER calculation spread sheet during the current monitoring period.
- After verifying the reported figures with the raw data sources, it is confirmed that the values of the parameters from the raw data sources are consistent with those quoted in the last version of the Monitoring Report and ER calculation spreadsheet.
- All the formulae have been found to be correctly applied in the GHG emission reduction calculations.
- The excel sheets were cross checked with the archived monitored data and no discrepancies were found.
- After revision of the MR and calculation spreadsheets, it is concluded that the GHG emission reductions and reductions spreadsheets are transparent and clearly referenced.
- The calculation of baseline emissions, project emissions and leakage emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan, the applied methodologies and related documents.
- Thus, the verification team is confident that the GHG calculation is correct, accurate, traceable and conservative.

3.8 Management and Operational System

The responsibilities of data measurement, collection, verifying, archiving etc. have been clearly defined in the MR. The data related to ER calculation as well as data monitoring, collection process etc. have been internally reviewed by the management of the Monitoring team regularly. The responsibility of each function is consistent with the monitoring plan in the registered PDD.

The information flow of each parameter has been verified by the assessment team via interviewing with responsible personnel.

It's verified during on site visit, the monitoring procedure as well as the internal quality management and control procedures are stipulated in the MR. The monitoring personnel have been interviewed by the assessment team and it's confirmed that the monitoring is implemented as per the procedure. Also, the training record and work certificate has been checked by the assessment team and it is confirmed that the monitoring personnel are get sufficient train to perform the monitoring.

All the data and documents, either hard copies or electric copies, will be kept for two years after the end of the crediting period or the last issuance of GS ERs for this Project, whichever occurs later.

4. REFERENCE

LIST OF DOCUMENTS	
S. No.	Document/Evidence/Reference/Web link, Version, Date
01	PDD Version 4, 27/02/2019.
02	- Annex R - GS Passport, version 3, 21/06/2018. - Annex Q – LSC Report, version 3, 23/05/2018.
03	Validation Report by ERM CVS, version 3, 19/09/2023.
04	- Principles and Requirements, version 2.0, 12/11/2024. - Validation and Verification Standard version 2.0, 12/11/2024. - Site Visit and Remote Audit Requirements, version 02, 30/05/2023. - Applicability of minimum site visit requirements VVB, 16/08/2021. - GHG Emissions Reduction & Sequestration Product Requirements, version 3.0, 12/11/2024. - Design Change Request Requirements and Procedures, version 2.0, 12/11/2024.
05	AMS-I.D. Grid connected renewable electricity generation Ver. 18.
06	Tool07: Tool to calculate the emission factor for an electricity system, version 07.0.
07	- Initial GS Monitoring Report Version 1, 01/12/2023. - GS Monitoring Report Version 1.1, 31/05/2024. - GS Monitoring Report Version 1.2, 13/01/2025. - GS Monitoring Report Version 1.3, 24/01/2025. - GS Monitoring Report Version 1.4, 31/01/2025. - GS Monitoring Report Version 1.5, 05/02/2025. - GS Monitoring Report version 1.6, 14/02/2025. - GS Monitoring Report version 1.7, 14/03/2025. - GS Monitoring Report version 1.8, 11/05/2025 - GS Monitoring Report version 1.9, 18/08/2025
08	- Initial ER calculation spreadsheet version 1, 01/12/2023. - ER calculation spreadsheet version 1.2, 05/06/2024. - ER calculation spreadsheet version 2, 09/01/2024. - ER calculation spreadsheet version 3, 24/01/2024. - ER calculation spreadsheet version 4, 31/01/2025. - ER calculation spreadsheet version 5, 05/02/2025 - ER calculation spreadsheet version 6, 08/02/2025. - ER calculation spreadsheet version 7, 14/02/2025. - ER calculation spreadsheet version 8, 14/03/2025. - Final ER calculation spreadsheet version 9, 30/04/2025 (Panasolar Photovoltaic Project ER sheet V9-30042025.xlsx).

09	EF 's calculation spreadsheets: 1. EF year 2019 (EF Panasolar 2019.xlsx) 2. EF year 2020 (EF Panasolar 2020.xlsx) 3. EF year 2021 (EF Panasolar 2021.xlsx) 4. EF year 2022 (EF Panasolar 2022.xlsx) 5. EF year 2023 (EF Panasolar 2023.xlsx)
10	Single Line Diagram, r13.
11	Photographs of monitoring equipment and technology implemented.
12	Energy Meter Readings (raw data) covering the monitoring period.
13	Energy Invoices covering the monitoring period.
14	Calibration certificates: 1. Audit Service Records #CND-SOP-MET-PR-SAS-02-01, issued by CND, 17/05/2019. 2. Audit Service Records #CND-SOP-MET-PR-SAS-02-01, issued by CND, 21/08/2020. 3. Audit Service Records #CND-SOP-MET-PR-SAS-02-01, issued by CND, 11/03/2022. 4. Audit Service Records #CND-SOP-MET-PR-SAS-02-01, issued by CND, 24/03/2023.
15	Operations Rules - "Reglamento de Operacion", published by the National Dispatch Center - "Centro Nacional de Despacho", February 2018.
16	Operation License No. ETE-DCND-GOP-PMP-2021, 24/05/2021 (Start of commercial operation 27/04/2021).
17	Generation License by resolution No. 7374, 23/05/2014.
18	Environmental Approval by resolution no. 042-2013, 30/04/2013.
19	Energy Purchase Agreements with different buyers.
20	a) Description of the technology (technical data specifications) of the power plant. b) PV Energy Yield Assessment (Definitive Design), Photovoltaic Plant Panasolar, prepared by Thesan USA, Rev01. c) SEL 735 Data Sheet: SEL-735 Power Quality and Revenue Meter, issued by Schweitzer Engineering Laboratories, Inc (Date code 20240306)
21	a) List of job created. b) Payroll information. c) Source of minimum salary in Panama: www.mitradel.gob.pa. d) Training regarding safe and healthy working conditions or other technical project implementation aspects. e) Purchase records of personal protective equipment (PPE). f) Contracts of employees. g) Agreement between Panasolar Generation S.A. and Vista Hermosa Community regarding the donation of the tank, 27/04/2017. h) Act No. CL-2-2017 of the meeting between Panasolar Generation S.A. and Vista Hermosa Community regarding the donation of the tank, 27/04/2017. i) Census of households of Vista Hermosa community by INEC (Instituto Nacional de Estadística y Censo=

22	Photos and videos of operation of tank in the local community.
23	a) Grievance mechanism book. b) General Procedure to handle Grievances (SG-PG-03), R1. c) Photo of grievance mailbox which is physically installed at the local church
24	Report of failures and repairing.
25	Sources to calculate the EF: a) IPCC Guidelines for National Greenhouse Gas Inventories, Reference Manual, Volume 2 (2006), Chapter 1. Table 1.4 Lower limit of the uncertainty at a 95% confidence interval. b) https://www.cnd.com.pa/index.php/informes/categoria/informes-de-mercado?tipo=88&anio=2020 c) https://sitioprivado.cnd.com.pa/Estadistica/Download/11?key=VXd9e23Z9JRA5aIUR21R-P8gocoGOMqdvSo79FduN d) https://cdm.unfccc.int/Projects/projsearch.html
26	a) Deviation Request Form No. DEV_795, approved 27/10/2024. b) Deviation Request Form No. DEVRQ-170, approved 31/07/2025.
27	SMEC (Metodología para la Verificación del Sistema de Medición Comercial) done by the CND (Centro Nacional de Despacho) established in statement MVS.6.2.7 that the equipment must be calibrate annually.
28	DTE Reports issued by CND (Dispatch National Center), covering the monitoring period.
29	Voluntary Carbon Programs: a) UNFCCC: https://cdm.unfccc.int/Projects/projsearch.html b) GS: https://registry.goldstandard.org/projects?q=&page=1 c) VERRA: https://www.vcsprojectdatabase.org/#/home d) The Climate Action Reserve: https://thereserve2.apx.com/myModule/rpt/myrpt.asp?r=111 e) Global Carbon Council: https://projects.globalcarboncouncil.com/
30	Article 6 Pipeline: https://unepccc.org/article-6-pipeline/
31	International Carbon Action Partnership: https://icapcarbonaction.com/es/ets
32	Record of start of operation of Panasolar Generation dated on 11/05/2019.

7. FINAL VERIFICATION STATEMENT

Applus+ Certification has been engaged by "Panasolar Generation S.A." to perform the first periodical verification of the "Panasolar Photovoltaic Project" (GS Ref. No. 3556).

The consultancy company Anaconda Carbon S.A. is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project's Monitoring Plan in the registered PDD, the GS Passport, the GS4GG Transition Annex and the applied methodology AMS-I.D.

Our verification approach was based on the requirements as defined under the Kyoto Protocol, Marrakesh accord, as well as those defined by the Gold Standard for the Global Goals. Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. The verification can confirm that:

- the project is operated as planned and described in the project design document, passport and transition annex approved by the GS;
- the monitoring plan is as per the applied methodology;
- the monitoring in Monitoring Report is as per the PDD, Passport and Gold Standard for the Global Goals Transition Annex and the monitoring plan approved by the EB and GS;
- the development and maintenance of records and reporting procedures are in accordance with the registered monitoring plan;
- the installed equipment being essential for generating emission reduction runs reliably and when delays in calibration have been observed, appropriate deduction has been applied;
- the monitoring system is in place and generates GHG emission reductions data;
- the GHG emission reductions are calculated without material misstatements.

In our opinion, the GHG emission reductions for "Panasolar Photovoltaic Project" (GS Ref. No. 3556) for the monitoring period 04/11/2019 to 30/11/2023 as reported in Monitoring Report, prepared on the basis of the project's Monitoring Plan are fairly stated.

Based on the information we have seen and evaluated, we confirm the following statement:

Reporting period:	From 04/11/2019 to 30/11/2023
Verified emissions in the above reporting period:	
Leakage emissions	0 tCO ₂ equivalents
Project emissions	0 tCO ₂ equivalents
Baseline emissions:	
Emission reductions in 2019 (04/11/2019 - 31/12/2019)	1,180 tCO ₂ equivalents
Emission reductions in 2020 (01/01/2020 - 31/12/2020)	6,852 tCO ₂ equivalents
Emission reductions in 2021 (01/01/2021 - 31/12/2021)	6,352 tCO ₂ equivalents
Emission reductions in 2022 (01/01/2022 - 31/12/2022)	5,910 tCO ₂ equivalents
Emission reductions in 2023 (01/01/2023 - 30/11/2023)	6,306 tCO ₂ equivalents
Total Emission reductions	26,600 tCO_{2e} equivalents

Date: 21/08/2025

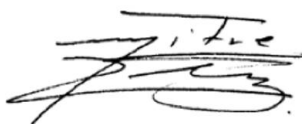
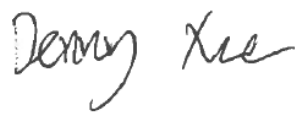
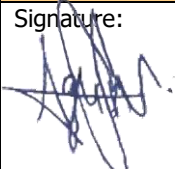
Lead Auditor: Raul Gonzalez Mitre

Tech. Expert: Raul Gonzalez Mitre

Tech. Reviewer: Denny Xue

Approver (Applus+ Certification VVB Technical Manager):

Mr. Agustín Calle de Miguel

ASSESSMENT TEAM	
Lead Auditor: Raul Gonzalez Mitre	Technical Reviewer: Denny Xue
Signature: 	Signature: 
Approver: Mr. Agustín Calle de Miguel	
Signature: 	

8. CORRECTIVE ACTION REQUEST, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS.

Table 1 Remaining FAR from validation

FAR ID	Section No.	3.2	Date: 15/04/2025
Description of FAR			
The verifying VVB shall verify and assess the grievance mechanism at the time of first verification.			
Project participant response			Date: 21/05/2025
To facilitate community feedback, the PD has installed a grievance mailbox at the local church. Community members also have direct access to the Plant Administrator for communication. The mailbox is checked weekly by the Plant Administrator, specifically every Monday. No grievances or comments were received during the current monitoring period of the project activity.			
Documentation provided by project participant			
N/A			
VVB assessment			Date: 21/05/2025
This has been already assessed in the Verification report, section 3.2 project implementation: <i>During the onsite visit, the verification team confirmed that community representatives are always allowed to contact the Plant Administrator. Furthermore, there are different grievance mechanisms in place such grievance book or the grievance mailbox which is physically installed at the local church. By checking grievance records at site & submitted by PP, it was able to confirm there are no comments received from any employee for the present monitoring period towards project activity. This has been cross checked through interviews during on site visit. No discrepancies were identified.</i> FAR is closed.			

Table 2 FARs raised as part of the Performance Review by GS

No FARs during performance review.

Table 3 CL from this verification

CL ID	01	Section no.	3	Date: 04/12/2023
Description of CL				
Clarification is required regarding the fulfillment of the maximal site visit requirement of 2 years after the start of the crediting period, according to the official document from GS "Applicability of Minimum Site Visit Requirements by VVB" (publication day 16/08/2021), where states in paragraph 2.2.2: First site visit: In case the VVB site visit is not conducted within first two years after the start of crediting period, i. If the start date of the crediting period (as specified in registered PDD) is after the project				

registration date, the VVB shall review the project's compliance with paragraph 3.1.3(b) of the Design Change Requirements and the start date of the crediting period can be updated accordingly.

The reasons for delays could be either Force or Non-force majeure.

- ii. If the start date of the crediting period is before the project registration date and the delays were due to;
 - a. Force majeure, the project crediting period start date may be postponed for a maximum up to two years. In such a case, the VVB shall validate that no changes have occurred to the baseline, otherwise a conservative approach needs to be followed.
 - b. Non-Force Majeure, no deviation is allowed. The VVB shall not verify the monitoring period falling before two-year of the site visit date. Under similar circumstances for GSCERs projects, CERs only for two years before the site visit date shall be labelled as GSCERs.

Considering the approved crediting period stated in the impact registry web site is from 01/06/2018 to 31/05/2025 and the registration occurred till year 2023 (as stated in the Validation Report by ERM CVS, version 3, 19/09/2023), the PP shall clarify the reason behind the delay and proceed according to the above options stated by the GS. If an option is not available, a "Deviation Request Form" shall be submitted to the GS which will also affect the current monitoring period dates. Please include all this information and justification in the MR.

Source: <https://globalgoals.goldstandard.org/ru-2021-applicability-of-minimum-site-visit-requirements-by-vvb/>

Project participant response

Date: 31/05/2024

As has been discussed with SustainCert during the validation process, the project activity suffered numerous delays in project implementation and therefore the site visit had to be delayed substantially. Shortly after the project registration (less than two months after) a VVB has visited the project activity.

Documentation provided by project participant

MR, V1

VVB assessment

Date: 06/06/2024

As the project start date was on 12/07/2016 (date of order of equipment as per PDD, v4, section C.1) which is before the project registration (No day available at GS web site but date of Validation Report v3 is 19/09/2023), **the PD shall indicate the reason of delay** according to paragraph 2.1.1 of the Applicability of Minimum Site Visit Requirements by VVB:

- a. Force majeure: Any cause constituting force majeure i.e., an event beyond the control of the project developer and not involving the developer's fault or negligence and not foreseeable. Such events may include, but are not limited to;
 - any act of war (whether declared or not), invasion, revolution, insurrection, terrorism, or any other acts of a similar nature or force, that prevents VVB travel to project site
 - Natural disaster like flood, earthquake, etc.
 - Change in Governmental requirements, policy, etc that affect the project implementation and operation
 - Any other situation which meets the definition above

Force majeure does not include shortage of personnel, industrial action, economic downfall, sickness of personnel, breach of contract by subcontractors and liquidity or solvency problems.

b. Non-force majeure: Any other cause that is not covered under force majeure

In case proper evidence and justification is not provided to demonstrate delays were due to Force majeure, then according to paragraph 2.2.2, ii, b:

Non-Force Majeure, no deviation is allowed. The VVB shall not verify the monitoring period falling before two-year of the site visit date.

CL remains open.

Project participant response

Date: 14/01/2025

PG-EXT-10-2024- letter provided by the project proponent detailing the process leading up to the successful validation of the project activity which was substantially delayed as described above.

Deviation Request – Decision: Letter provided by Sustain Cert detailing the approval of the deviation request for the Verification Frequency Deviations due to substantial delays with project activity registration under Gold Standard.

Documentation provided by project participant

Deviation Request Form approved 27/10/2024

VVB assessment

Date: 19/01/2025

The Deviation Request Form approved by GS on 27/10/2024 has been checked. According to this document, the verification process shall be completed by 31/03/2025, with no further extension.

CL is closed.

Table 4 CAR from this verification

CAR ID	01	Section no.	3	Date:	04/12/2023
Description of CAR					
The following shall be corrected in general information and section A of the MR: - The duration of the MP, according to resolution of CL 02. Page 2: blue text box in page 2 shall be eliminated. Key Project Information: use 2 digits in the date for the "Duration of this monitoring period". Table 1 - Sustainable Development Contributions Achieved: - it shall be included only data of the SDGs. Either MWh or GS VERs per SDG. - Amount achieved is incorrect for both SDGs and those values shall not be in bold. Table 2 - Product Vintages: - ER shall be rounded down. - Furthermore, product vintage of energy generation is missing. Section A.2: please check the following: - The name of the project in the Impact Registry web site is "Panasolar Generation" while the project activity name is Panasolar Photovoltaic Project. Clarification is required.					

- b) The location map in the Impact Registry web site is located in Sri Lanka: <https://registry.goldstandard.org/projects/details/1340>. Corrections shall be requested.
- c) When including the coordinates in google maps, it actually shows a location in Sri Lanka: <https://www.google.com/maps/place/8%C2%B013'00.0%22N+80%C2%B041'34.0%22E/@7.9960813,80.682531,8.82z/data=!4m4!3m3!8m2!3d8.216667!4d80.692778?entry=ttu>
- This might be a problem with coordinates format. Please check.

7. Section A.3:

- a) As EF is calculated ex-post, the most recent version of Tool 07 shall be used. It is mentioning here version 6.
- b) Applicability conditions have been wrongly included in this section. Actually, this has been already assessed during initial validation. Hence, it is not necessary anymore to include it in the MR.

- 8. Section A.4:** the dates of the crediting period shall be included here (from DD/MM/YYYY to DD/MM/YYYY);

Project participant response

Date: 31/05/2024

1. MP for the project activity conforms to the last two years previous to the site visit by a VVB
2. Blue text box in page 2 eliminated
3. Date modified.
4. a) table modified
 - b) Amount achieved updated.
5. a) ER rounded down.
 - b) Energy Generation added
6. a) We will request the modification of the name of the project
 - b) correct coordinates updated in monitoring report. We will request the update of the coordinates to GS.
 - c) Coordinates checked and updated.
7. a) version of tool updated.
 - b) Applicability conditions deleted
8. Crediting period date included.

Documentation provided by project participant

GS3556- Panasolar- Monitoring Report

VVB assessment

Date: 06/06/2024

1. Clarification is required why the crediting period stated in the GS web site is 01/06/2018 to 31/05/2025 but the monitoring period corresponds to 01/12/2021 to 30/11/2023. What happened with the period corresponding to 01/06/2018 to 30/11/2021?
2. Blue text box in page 2 was eliminated.
3. Date is now in the correct format.
4. Table 1 modified as per request. Amount achieved were corrected.
5. Product vintage of energy generation was included. Nevertheless, please use 2 digits for all dates as it has been included 1/12/2021.
6. The name is still not corrected. Project location was corrected.
7. Ef tool version was updated. Applicability conditions were eliminated as requested.

8. The crediting period dates are incorrect. It has been included 31/05/2018 - 30/05/2025 instead of the dates stated in the GS web site: 01/06/2018 to 31/05/2025. Correction is necessary.

Hence, please consider the following which was not properly closed:

- a) Clarification is required why the crediting period stated in the GS web site is 01/06/2018 to 31/05/2025 but the monitoring period corresponds to 01/12/2021 to 30/11/2023. What happened with the period corresponding to 01/06/2018 to 30/11/2021?
- b) Table 2: please use 2 digits for all dates as it has been included 1/12/2021.
- c) The name of the project is still not corrected in the GS web site. If this is not possible, the given name "Panasolar Generation" shall be used instead.
- d) The crediting period dates are incorrect. It has been included 31/05/2018 - 30/05/2025 instead of the dates stated in the GS web site: 01/06/2018 to 31/05/2025. Correction is necessary.
- e) Version number of the MR was not updated. This shall be updated every time a new version of the document is issued.
- f) Table 1 included in section A.3 shall not be included. This section is just to provide reference to the applied methodology and tools. It shall be eliminated.
- g) Section A.4: It is stated as PoA but the project is a single one.

CAR remains open.

Project participant response

Date: 14/01/2025

- a) Monitoring period updated according to the deviation request approved by Sustain-Cert (from 05/14/2019 to 12/31/2023)
- b) Dates updated on table 2 using 2 digits format.
- c) The name of the project is now corrected on the Impact Registry web site.
- d) The crediting period dates were corrected according to the dates stated in the GS web site: 01/06/2018 to 31/05/2025.
- e) Version number of the MR was updated.
- f) Table 1 included in section A.3 was eliminated.
- g) Section A.4 updated. Project is now described as a stand-alone project and not part of a PoA.

Documentation provided by project participant

GS3556- Panasolar- Monitoring Report. PL-090125: Updated Monitoring Report

VVB assessment

Date: 19/01/2025

- a) The Deviation Request Form approved by GS on 27/10/2024 has been checked. It has been stated by GS a monitoring period from 14/05/2019 to 31/12/2023. The PD is verifying the monitoring period till 30/11/2023. This means from 14/05/2019 to 30/11/2023. No further discrepancies were identified.
- b) Correction has been done. No further discrepancies were identified.
- c) Name has been now corrected in the web site as Panasolar Photovoltaic Project. No further discrepancies were identified.
- d) Crediting period dates has been corrected as per GS web site: 01/06/2018 to 31/05/2025. No further discrepancies were identified.
- e) Version number updated.
- f) There is still a table included in section A.3 which is not related to the applied methodology. This shall be relocated to other section.

A.3. Reference of applied methodology

>>

Title: Grid connected renewable electricity generation



Phase	Start
Land Purchase	June 24, 2014
Financial Closure	December 21, 2017
Order of Equipment	July 12, 2016
Construction Begins	August 01, 2017
Commissioning	August 31, 2018

Reference: The project activity meets the eligibility criteria to use the simplified modalities and procedure

for small-scale CDM project activities as set out in paragraph 6 (c) of decision 17/CP.7.

g) Corrected as requested. No further discrepancies were identified.

CAR remains open.

Project participant response

Date: 25/01/2024

f) Table relocated in Section C.

Documentation provided by project participant

MR, V1.3

VVB assessment

Date: 26/01/2024

Table was eliminated and now the MR fulfills the M template guidance. No further discrepancies were identified.

CAR is closed.

CAR ID	02	Section no.	3	Date: 04/12/2023
Description of CAR				
The following shall be corrected in section B of the MR:				
- Section B.1: the actual status of implementation of the project shall be included here. - Section B.2.3: update the information of the start date of the crediting period according to resolution of CL 02.				
Project participant response				Date: 31/05/2024
- Project status is operational (producing electricity and exporting to the national grid) - MP for the project activity conforms to the last two years previous to the site visit by a VVB				
Documentation provided by project participant				
GS3556- Panasolar- Monitoring Report				
VVB assessment				Date: 06/06/2024

1. Description of actual implementation operation status of the project activity is not enough. Further information regarding the actual operation status, downtimes, failures and any other important data shall be included here. As this is the first verification, more detailed information shall be given to demonstrate that the project has been implemented as per PDD description.
2. There are comments marked in yellow, please eliminated them.

CAR remains open.

Project participant response

Date: 14/01/2025

1. More detailed information regarding the project implementation for the monitoring period has been included in section B.1.
2. Comments marked in yellow have been eliminated.

Documentation provided by project participant

VVB assessment

Date: 19/01/2025

1. Section B.1: the actual status of implementation of the project has been correctly included in the section. The description corresponds to the actual situation observed during on site visit. No further discrepancies were identified.
2. Comments marked in yellow were eliminated. No further discrepancies were identified.

CAR is closed.

CAR ID	03	Section no.	3	Date: 04/12/2023
Description of CAR				

The following shall be corrected in section D of the MR:

1. **Section D.2: Parameter $EG_{facility,y}$:**
 - a) Value applied shall be given per vintage year.
 - b) No monitoring equipment description has been included.
 - c) No information regarding calibration has been included: calibration dates and validity.
 - d) Cross check with review of the receipts of electricity sales as stated in the registered PDD has not been provided.
2. **Section D.2: Parameter $EF_{grid,CM,y}$:**
 - a) In value applied, ER shall not be mentioned, just the EF.
 - b) The measurement method included to calculate the EF is not correct.
 - c) Monitoring frequency is not correct.
3. **Section D.2:** No parameters as stated in the GS Passport has been included, such as:
 - a) **Quantity of employment and income generation:** number of jobs created in the operation of the project and their salary levels. Proportion locally hired employees will also be monitored.
 - b) **Quality of employment:** payroll information of employees and how it compares to minimum wage in Panama number of events that have training staff regarding safe and healthy working conditions or other technical project implementation aspects. Provision of adequate personal protective equipment (PPE).
 - c) **Human and institutional capacity:** number of employees in skilled jobs, proportion of locally hired employees and number of training sessions;
 - d) **Livelihood of the poor:** operation of tank in the local community
4. **Section D.3:** Monitored parameters were repeated twice. Furthermore, monitored parameters as stated in the Sustainability Monitoring Plan included in the GS Passport are missing. See previous item.

Project participant response

Date: 31/05/2024

1. a) Value applied updated
 b) Monitoring equipment description has been included.
 c) Information regarding calibration has been included.
 d) Cross check with review of the receipts of electricity sales
2. a) ER value deleted
 b) Measurement Method updated
 c) Monitoring frequency updated
3. a) Parameter added
 b) Parameter added
 c) Parameter added
 d) Parameter added
4. Monitored parameter updated

Documentation provided by project participant

GS3556- Panasolar- Monitoring Report

VVB assessment

Date: 06/06/2024

1. Section D.2: Parameter $EG_{facility,y}$:

- a) Values applied were given now as per vintage
- b) Monitoring equipment description has been provided. Nevertheless, it is stated "and backup meters (meter #3)" but only data of 2 meters were provided. Please clarify or provide data of the 3rd meter.
- c) Calibration dates have been included. Nevertheless, the certificates provided are dated on:
 - 11/03/2022 (valid till 10/03/2022)
 - 24/03/2023 (valid till 23/03/2024)

This means that no calibration certificate was provided to cover the period from 01/12/2021 to 11/03/2022. Furthermore, there is a gap in the calibration from 10/03/2022 to 24/03/2023 (15 days). In case no evidence is provided, the maximal error of the measurement equipment shall be applied to the delayed period (Export & Import).

- d) Only invoices of June 2023 have been provided. Please provide invoices covering the whole monitoring period or any other document to be able to cross check data of energy generation and consumption.

2. Section D.2: Parameter $EF_{grid,CM,y}$:

- a) Only value of ER has left.
- b) The measurement method is still incorrect. The one included is the measurement method to calculate the BE, not the emission factor of the grid. Correction is necessary.

3. Section D.2: all parameters as stated in the GS Passport has been correctly included. No discrepancies were identified. It is only missing for indicator Quantity of employment and income generation, the proportion (%) locally hired employees. Furthermore, do not include the number of trainings in each parameter as it shall be included in parameter Human and institutional capacity

4. Section D.3: Monitored parameters were corrected and duly included in this section. No discrepancies were identified.

Hence, please consider the following which was not properly closed:

Section D.2: Parameter $EG_{facility,y}$:

- a) Monitoring equipment description has been provided. Nevertheless, it is stated "and backup meters (meter #3)" but only data of 2 meters were provided. Please clarify or provide data of the 3rd meter.
- b) Calibration dates have been included. Nevertheless, the certificates provided are dated on:
 - 11/03/2022 (valid till 10/03/2023)
 - 24/03/2023 (valid till 23/03/2024)

This means that no calibration certificate was provided to cover the period from 01/12/2021 to 11/03/2022. Furthermore, there is a gap in the calibration from 10/03/2023 to 24/03/2023 (15 days). In case no evidence is provided, the maximal error of the measurement equipment shall be applied to the delayed period (Export & Import).

- c) As the calibration certificates does not have any validity, the applicable Panama Law shall be provided (indicating section and page) to demonstrate the calibration frequency is on a yearly frequency.
- d) Only invoices of June 2023 have been provided. Please provide invoices covering the whole monitoring period or any other document to be able to cross check data of energy generation and consumption.

- e) The measurement method is still incorrect. The one included is the measurement method to calculate the BE, not the emission factor of the grid. Correction is necessary.

SDG Parameters:

- f) For indicator quantity of employment and income generation, the proportion (%) locally hired employees is missing. Furthermore, do not include the number of trainings in each parameter as it shall be included in parameter Human and institutional capacity.

CAR remains open.

Project participant response	Date: 14/01/2025
a) This is an internal meter of the plant, it has no commercial functions, it measures the energy produced by the Solar Power Plant without taking into account other factors such as voltage losses in the interconnection line with the Llano Sánchez substation or damage or failures in the aforementioned line or in the substation. This meter is used for internal measurement purposes and has no commercial or fiscal function as it does not measure the energy injected into the grid. The meter is an integral part of the Delivery Station and is embedded in it. b) Maximal error is applied. According to its technical manual, the maximal error is 0.025%. c) SMEC (Metodología para la Verificación del Sistema de Medición Comercial) done by the CND (Centro Nacional de Despacho) established in statement MVS.6.2.7 that the equipment must be calibrate annually. d) Cross Check generation should be with data provided by the CND (Centro Nacional de Despacho). CND reports shared. In the documents named "DTE_Oficial_PANASOLAR", page 2 "Datos Informativos", you could see the generation exportation and importation of energy. • Exportation: "Generado" – "Energía en Contratos de Reserva" (page 3-"Contratos") • Importation: "Consumo" (page 2- "Datos Informativos") e) Measurement Method to calculate the EF was included on Section D.2: Parameter $EG_{facility,y}$ f) SDG Parameters updated. The proportion of the locally hired is 100% of the employees.	
Documentation provided by project participant	
a) PG-EXT-09-2024: Letter from project proponent describing the history and use of third meter. b) Meter 735_DS_20240306, page 5: Electricity meter user manual with description of maximum error. c) "Metodología para la Verificación del Sistema de Medición Comercial (SMEC)" and "Resolucion ASEP 92976" Which details the periodical calibration of electricity meters. d) Folder "DTE Oficial" and Liquidación Oficial – SCADA (Column E = Import and Column F=Export) Which contains information needed to complete energy export and import crosscheck with meter information.	
VVB assessment	Date: 19/01/2025

- a) Clarification has been provided and 3rd meter has been eliminated. No further discrepancies were identified.
- b) Maximal error has not been correctly applied nor it has no covered all gap periods. The following gaps have been identified:

Calibration gap: from / to	14/05/2019 17/05/2019
Calibration date: from / to	17/05/2019 16/05/2020
Calibration gap: from / to	16/05/2020 21/08/2020
Calibration date: from / to	21/08/2020 20/08/2021
Calibration gap: from / to	20/08/2021 11/03/2022
Calibration date: from / to	11/03/2022 10/03/2023
Calibration gap: from / to	10/03/2023 24/03/2023
Calibration date: from / to	24/03/2023 23/03/2024

Nevertheless, the PD has just applied the error to the following periods:

- From Nov. to Dec. 2019
- Jan. 2020
- From Jan to Oct. 2021
- From Jan. to Mar. 2022
- Nov. 2023

Correction is necessary. Furthermore, different days of calibration have been provided in the MR (01/11/2018, 14/01/2020, 11/11/2021, 16/11/2020). None of these certificates were provided nor corresponds to the only 2 calibration certificates actually provided on 31/05/2024 ("5. *Certificados de Calibracion.pdf*").

- c) Clarification was provided and accepted by the VT. It is stated in page 3, section MV.6 the annual calibration.
- d) The CND Reports have not yet been provided. Please submit them for the whole new monitoring period being evaluated.
- e) Corrected as requested. No further discrepancies.
- f) Corrected as requested. No further discrepancies

CAR remains open.

Project participant response

Date: 25/01/2024

b) The calibration dates were updated according to the calibration certificates. Maximum error was applied to the calibration gaps. ER sheet and MR was updated.

d) CND Reports were provided for the whole new monitoring period.

Documentation provided by project participant

MR, V1.3

VVB assessment

Date: 26/01/2024

b) Calibration dates have been now correctly given, including gaps in calibration. The calibration certificates were checked and the ER calculation. No errors, miscalculations, omissions, misstatements, or incomplete information have been identified.

d) The CND Reports have been provided and were cross checked against the ER calculation. No errors, miscalculations, omissions, misstatements, or incomplete information have been identified.

During technical review performed on 05/02/2025, the following has been identified:

1. Please clarify if accuracy class of 0.2 corresponds to the maximal error of 0.025% or it is 0.020%. Please provide precise reference (page, section, etc.)?
2. Please also specify in the monitor parameter which kind of trainings are given per year.
3. Please see comments directly in the ER spread sheet:

a) Tab "ER Calculation Summary": missing SDG comparison for SDG7 and SDG8 as well as SDG 13

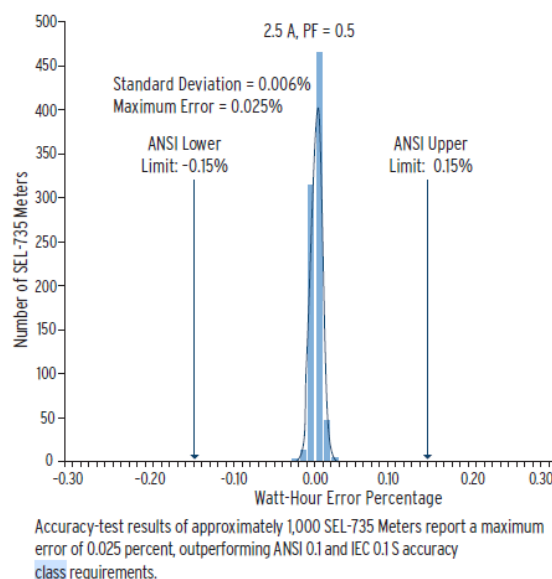
b) Tabs "ER Calculation 2019, 2020, 2021, 2022, 2023": No cross check has been included.

CAR remains open.

Project participant response

Date: 05/02/2024

1. According to the Technical Specifications of the meter model SEL-735, the maximal error is 0.025% corresponding to class 0.1 outperforming ANSI 0.1 and IEC 0.1 S accuracy class requirements. Please see document "Meter 735_DS_20240306" page 5, figure 2.



2. MR Updated. The trainings are specified in the monitoring parameters.
3. ER Sheet updated
 - a) SDG comparison added
 - b) Cross check added according to the raw data of the utility report

Documentation provided by project participant

1. Meter 735_DS_20240306: meter technical sheet. Figure 2 specifies the maximum error of the meter.
2. GS3556- Panasolar Photovoltaic Project- Monitoring Report. PL-V5-050225: Monitoring report updated.
3. Panasolar Photovoltaic Project ER sheet V5-050225: Emission reductions calculation

VVB assessment

Date: 06/02/2024

1. It has been clarified and corrected in the MR. No further discrepancies were identified.
2. Detailed information about the trainings have been defined. No further discrepancies were identified.
3. SDG comparison have been now added and cross check has been also added. No further discrepancies were identified.

CAR is closed.

CAR ID	04	Section no.	3.7	Date: 04/12/2023
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Description of CAR

The following shall be corrected in section E of the MR:

1. **Section E.1:**
 - a) No description of the methodological choices, equations and values to calculate the emission factor has been given.
 - b) When describing the parameters, the proper subindex shall be used: CO₂ instead of CO2.
 - c) Parameters shall be aligned with the one described in the registered PDD (EG_{facility,y} Vs EG_{BL,y} and EF_{grid,CM,y} Vs EF_{CO2,grid,y}).
2. **Section E.4:**
 - a) SDGs were repeated and also there are missing parameters. See CAR 03.
 - b) Net benefit is wrongly determined.
3. **Section E.5:** The value included for "values estimated in ex ante calculation of approved PDD for the monitoring period" is incorrect as it shall be calculated according to the extent of the monitoring period. Furthermore, other parameters are also missing.
4. **Section E.5.1:** explanation of calculation of value estimated ex ante calculation of approved PDD for this monitoring period is missing.

Project participant response

Date: 31/05/2024

1. a) Updated
b) updated
c) Updated
2. a) updated
b) Updated
3. Updated
4. Updated

Documentation provided by project participant

GS3556- Panasolar- Monitoring Report

VVB assessment

Date: 06/06/2024

1. **Section E.1:**

- a) Not corrected. There is still no description of the methodological choices, equations and values to calculate the emission factor has been given.
- b) Proper subindex has been used.
- c) Parameters have been aligned.

2. **Section E.4:**

- a) Section corrected and missing parameters included.
- b) It is stated VPA but the project is not a PoA.

3. **Section E.5:** For SDG #7, it has been included VERs instead of MWh.

4. **Section E.5.1:** yearly emission reduction is not 23,159, this is the total amount of the monitoring period which comprises 2 years. The calculation shall be included here in order to allow the reader to compare the yearly ex-ante values and yearly the ex-post values. This section shall be fully updated.

5. **Section E.6:** explanation is not enough. As the monitored result of energy generation is almost double (51,655 MWh) compared to the ex-ante value (19,662 MWh), detailed justification shall be provided.

Hence, please consider the following which was not properly closed:

- a) **Section E.1:** There is still no description of the methodological choices, equations and values to calculate the emission factor has been given
- b) **Section E.4:** It is stated VPA but the project is not a PoA.
- c) **Section E.5:**
 - For SDG #7, it has been included VERs instead of MWh.
 - Furthermore, it shall be included the ex-ante value of employees and trainings according to the registered PDD.
- d) **Section E.5.1:** yearly emission reduction is not 23,159, this is the total amount of the monitoring period which comprises 2 years. The calculation shall be included here in order to allow the reader to compare the yearly ex-ante values and yearly the ex-post values. This section shall be fully updated
- e) **Section E.6:** explanation is not enough. As the monitored result of energy generation is almost double (51,655 MWh) compared to the ex-ante value (19,662 MWh), detailed justification shall be provided.

CAR remains open.

Project participant response

Date: 14/01/2025

- a) Description of the methodological choices, equations and values to calculate the emission factor has been added to the MR.
- b) Section E.4 it is stated as Project.
- c) Section E.5 was updated. SDG#7 has been included MWh. Ex-ante value of employees and trainings according to the registered PDD was added.
- d) Section E.5.1 was updated. The yearly emission reduction is modified to 10,322 VERs. The calculation of the value estimated ex ante calculation of approved PDD is added.
- e) The ER Sheet was updated according to the generation reported by SCADA. The actual monitored result of energy generation is below the ex-ante value expectations.

Monitoring period results:

14/05/2019-31/12/2019: 7,1623 MWh
 01/01/2020-31/12/2020: 14,151 MWh
 01/01/2021-31/12/2021: 14,589 MWh
 01/01/2022-31/12/2022: 14,122 MWh
 01/01/2023-30/11/2023: 14,799 MWh

The reasons why there was a generation lower than the ex-ante values were:

1. The actual radiation is lower than had been estimated
2. There were technical problems with one of the plant's transformers.

Documentation provided by project participant

MR V1.2

VVB assessment

Date: 19/01/2025

- a) **Section E.1:** methodological choices, equations and values to calculate the emission factor has been given. No further discrepancies were identified.
- b) **Section E.4:** Corrected as requested. No further discrepancies were identified.
- c) **Section E.5:** Corrected as requested. No further discrepancies were identified
- d) **Section E.5.1:** It has been included "the calculation of value estimated ex ante approved by the PDD is as follows" which is not correct Please eliminate this information. This section is to compare the ex-ante values with the ex-post values. Only ex-ante yearly values have been provided which cannot be compared with the total ex-post values covering the whole monitoring period (13/05/2019-30/11/2023). Correction is still necessary.
- e) **Section E.6:** Still open as soon as comparable values will be provided in the previous findings. If ex-post values are higher than ex-ante values, proper justification shall be provided.

CAR remains open.

Project participant response

Date: 25/01/2024

- d) Calculation ex ante corresponding to the monitoring period is specified in the monitoring report and ER sheet.
- e) The actual monitored result of energy generation is below the ex-ante value expectations.

Documentation provided by project participant

Panasolar Photovoltaic Project ER sheet V3.24.01.2025

VVB assessment

Date: 26/01/2024

d) **Section E.5.1** unnecessary information has been eliminated as requested. No further inconsistencies were identified.

e) **Section E.6:** Ex-post values provided are lower compared to ex-ante values. Hence, no further justification is required. No errors, miscalculations, omissions, misstatements, or incomplete information have been identified.

CAR is closed.

CAR ID	05	Section no.	EF spread sheet	Date:	04/12/2023
Description of CAR					
The following shall be corrected in the Emission Factor (EF) calculation spread sheet:					
a) The EF calculation spread sheet was not provided. b) All sources to calculate the EF shall be provided.					
Project participant response					Date: 31/05/2024
a) <i>Spread sheet provided.</i> b) <i>Sources provided.</i>					
Documentation provided by project participant					
EF Calculation spread sheet					
VVB assessment					Date: 05/06/2024
The emission factor was assessed and the following has been identified:					
Tab "GEN"					
1. The source of energy generation is not visible from the source given. The exact route shall be provided to allow the reader to get the same data. The same for other tabs. 2. Please clarify why in cell D135 is cell D132 subtracted. Same for the following years;					
Tab "lambda 2021"					
3. Graphic is not visible					
Tab "BM"					
4. Calculation of $AEG_{SET-5-units}$ is incorrect as the plants are not ordered from the most recently added; 5. Please check calculation of $SET_{\geq 20\%}$; 6. The link if VCS project has been included, please clarify why?					
Tab "CM"					
7. Wrong determination of w_{OM} (0.25) and w_{BM} (0.75) but according to the applied tool (paragraph 86) it shall be the other way, for w_{OM} (0.75) and w_{BM} (0.25).					
The whole calculation of the EF shall be checked again when solve the errors and provide the methodological choices (step by step) in the PDD to calculate the EF.					
CAR remains open.					

Project participant response	Date: 14/01/2025
1. On Tab GEN: Source of energy generation and other tabs are now visible on EF workbook. 2. On Tab GEN: Formula on Cell D135 is updated on EF workbook. 3. On Tab Lambda 2021: graphic updated, now it is visible. 4. On Tab BM: Updated the plants order in EF file. 5. On Tab BM: The most recently 5 plants are not enough for the $SET \geq 20\%$ so we must add other recently plants to reach the 20%. Calculation updated in EF file. 6. On Tab BM: VCS link deleted in EF file, there was no VCS. 7. On Tab CM: The formula was updated according to the applied tool in EF file.	
Documentation provided by project participant	
EF Panasolar 2019: Calculation of the Emission Factor for 2019 EF Panasolar 2020: Calculation of the Emission Factor for 2020 EF Panasolar 2021: Calculation of the Emission Factor for 2021 EF Panasolar 2022: Calculation of the Emission Factor for 2022 EF Panasolar 2023: Calculation of the Emission Factor for 2023	
VVB assessment	Date: 19/01/2025
The emission factor was assessed again and the following has been identified: Tab "GEN" 1. The source of energy generation was provided to allow the reader to get the same data. The generation was checked and matches with the public sources. 2. Corrected 3. Tab "lambda 2021", Graphic is now visible. Corrected. 4. Tab "BM": a) Regarding $AEG_{SET-5-units}$ and $SET \geq 20\%$, as per the TOOL07, the PP should consider the <u>all power</u> units that started to supply electricity to the grid most recently. All plants should be considered until obtaining $SET \geq 20\%$, which is not correct in the excel sheets as compared with CND, 2023. file "CND_ESTADISTICAS_Capacidad_Instalada". b) The following should be reviewed: EFBM 2019 and 2020: i. The PP didn't considered Plants from 2019 such as Costa Norte (Gas Natural), Bejuco, Pocrí. Please clarify. ii. Plants from 2018 UEPPME1 and UEPPME2, were registered in the CDM so should not be considered. Esperanza from KANAN and Macano 3, started also in 2018 and were not included. Clarify or correct. iii. Plants from 2017: The only plants considered were Coclé venture and Azuer Venture, what about all the others that started in 2017, like PSZI (El Espinal) and others? Please clarify and/or correct. iv. In 2020, the plant PANDO from Electron Investment started operations. This was not included in EFBM 2020, clarify.	

- c) **EFBM2021:** Dates are in another format, please state DD/MM/YYYY. San Andrés states a wrong operations date. Also, in 2021, Solar Boqueron, Avanzalia, Solar Dev. Panama and Farallon Solar Fase 5, are missing.
- d) **EFBM2022:** Dates are in another format, please state DD/MM/YYYY. Only 3 plants that started in 2022 were stated, however in file mentioned above, 7 power units/plants started in 2022. Please check.
- e) **EFBM2023:** Dates are in another format, please state DD/MM/YYYY. Daconan Solar Etapa 3 is missing.

In summary the PP should include in order the most recent plants without exclusions or exemptions and then excluding all the CDM power units.

- 5. Calculation of $SET_{\geq 20\%}$, is 20% of the AEG_{total} total generation of the project electricity system which is correct (Tab L4), however all power units in the electricity system registered as CDM project activities should be excluded in Tab L3 (AEG_{total} Without CDM). Tab L2 should be the sum of the first 5 units, please correct. L4 would be the $SET_{\geq 20\%}$, please correct.
- 6. Corrected. The link of VCS was deleted.
- 7. Tab "CM" The PP corrected the weights as per the TOOL07, for w_{OM} (0.75) and w_{BM} (0.25).
- 8. The whole calculation of the EF was checked and the methodological choices (step by step) were included in the MR to calculate the EF. Finding is closed.

CAR remains open.

Project participant response		Date: 25/01/2024
a) All power units are considered as per Tool 7. EF Sheet 2019, 2020, 2021, 2022 and 2023 is updated. b) i. Costa Norte is GANA and is included; POGRÍ is PSOLAR2 and is included; Bejuco is not in file GEN 2020 (Please check file GEN 2020) ii. UEPPME1 and UEPPME2 are updated in EF 2019 and 2020 sheet. KANAN and MACANO are updated with 2018 date. Correction was done. iii. EF 2020 sheet was updated. CERRO AZUL is not in GEN 2020 file. COCLE SOLAR 1 or MILTON SOLAR is not in GEN 2019 file (We add the files GEN 2020 and 2019 to check it). iv. PANDO or ELECTRONIC INVESTMENT is not in GEN 2020 file (We add the file GEN 2020 to check it). c) EF 2021 sheet was updated. FARALLON SOLAR FASE 5 started in 2024, FARALLON SOLAR ETAPA 2, AVANZALIA, SOLARDEVEL and SBOQUERON added. d) Dates format updated in EF sheet 2022. In the file "CND Estadísticas Capacidad Instalada 2023" we have 7 units/plants started in 2022 (PARQUE SOLAR PRUDENCIA, DACONAN SOLAR ETAPA 1, DACONAN SOLAR ETAPA 2, MENDOZA SOLAR, DON FELIZ ETAPA I Y II, CEDRO SOLAR, CAOBA SOLAR) but in file GEN 2022 we just have 4 (CEDRO SOLAR, CAOBA SOLAR, 1 DACONANSOL, MENDOZA SOLAR o DSOLAR10). We attach GEN 2022 file to check it. e) EF 2023 Sheet is updated f) EF 2019, 2020, 2021, 2022 and 2023 are updated		
Documentation provided by project participant		
Generacion 2019: Generation of all plants in 2019 according to CND Generacion 2020: Generation of all plants in 2020 according to CND Generacion 2021: Generation of all plants in 2021 according to CND Generacion 2022: Generation of all plants in 2022 according to CND Generacion 2023: Generation of all plants in 2023 according to CND		
VVB assessment		Date: 27/01/2025

1. Please review the CDM plants, as all of them have to be **excluded** from the AEG_{total} total. In the OM state in column A which are CDM plants and crosscheck with <https://cdm.unfccc.int/Projects/projsearch.html> to determine which CDM plant correspond to which plant from the OM Tab. From the Gen total (MWh) the CDM plants have to be deducted to obtained the AEG_{total} total to be used in the BM.
2. The plant CORPISTMO included in the BM seems to have been confused with the one from GENISA (Barro Blanco Hydro Plant), as the start date matches, hence GENISA should be included instead of CORPISTMO. It is not clear CORPISTMO to which plant it corresponds.
3. El Fraile Solar is not in the CDM, the one in the CDM is "El Fraile Small Hydro Power Plant" (Hidro Ibérica) , in the OM excel sheet would be found as "HIBERICA".
4. CelsiaBON (Gualaca) and CelsiaALT (Lorena and Prudencia) are also CDM plants, which have to be excluded from the total. IN the CDM are registered as "Dos Mares Hydroelectric Project".
5. "Pando and Monte Lirio Hydroelectric Plants", is registered in the CDM (Monte Lirio have issued CERs from 2017 to 2020 and Pando in 2019 and 2020), however it is not clear to which plant it corresponds.
6. In Tab BM of all Emission Factors, please check table in Column K and L. K4 = Should be named "20% of the AEG_{Total}".
7. Clarify why some plants are considered in the CND,2023. file "CND_ESTADISTICAS_Capacidad_Instalada" and are not available in the GEN files.
8. Review Tab BM of EF 2020, 2021, 2022, 2023, AEGSET $\geq$ 20% is wrongly calculated. The TOOL07, paragraph 75. Item (b) should be followed. As per this paragraph **NO** CDM plants should be included. All other plants should be considered in the calculations, some plants are being excluded for no reason (such as AVANZALIA). To determine the AEGSET $\geq$ 20% the accumulated generation should reach the 20% of the AEG_{total} Without CDM.
9. As per paragraph 75. (c). From *SET5-units* and *SET $\geq$ 20 per cent* select the set of power units that comprises the larger annual electricity generation (*SETsample*). This was wrongly stated in EF 2020, EF 2021, EF 2022, and EF 2023.
10. EF2021, the column "Accumulated generation MWh" is not accumulated. Review and correct.

CAR remains open. PP should review all the BM as per the TOOL07 and correct all mistakes mentioned above. Versions of EF 2019, 2020, 2021, 2022 and 2023 should be updated.

Project participant response	Date: 03/02/2025
1. EF 2019, 2020, 2021, 2022 and 2023 are updated to include the whole CDM plants/units with generation. 2. EF 2019, 2020, 2021, 2022 and 2023 are updated to adjust CORPISTMO and GENISA (Barro Blanco Hydro Plant). 3. EF 2019, 2020, 2021, 2022 and 2023 are updated to exclude EL FRAILE SOLAR as CDM. 4. EF 2019, 2020, 2021, 2022 and 2023 are updated to CelsiaBON (Gualaca) and CelsiaALT (Lorena and Prudencia) CDMs. 5. EF 2019, 2020, 2021, 2022 and 2023 are updated to include EISA (Pando and Monte Lirio Hydroelectric Plants) CDM. 6. EF 2019, 2020, 2021, 2022 and 2023 are updated to adjust K4 name.	

7. Generation files used to calculate the EF are the official data downloaded from Centro Nacional de Despacho (CDN) Panama official web site. If there isn't a plant/unit in the generation files is due to this plant/unit had not generation in that year. We include the specific link to access generation files in CDN if you need to check it.
8. EF 2019, 2020, 2021, 2022 and 2023 are updated to adjust $AEGSET \geq 20\%$ calculation.
9. EF 2019, 2020, 2021, 2022 and 2023 are updated to adjust *SETsample* calculation.
10. EF 2021 is updated to adjust Accumulated generation MWh.

Documentation provided by project participant

EF Panasolar 2019 (1): Calculation of the Emission Factor for 2019
 EF Panasolar 2020 (3): Calculation of the Emission Factor for 2020
 EF Panasolar 2021(2): Calculation of the Emission Factor for 2021
 EF Panasolar 2022 (2): Calculation of the Emission Factor for 2022
 EF Panasolar 2023 (2): Calculation of the Emission Factor for 2023
 GS3556- Panasolar Photovoltaic Project- Monitoring Report. PL-310125: Monitoring Report Updated.

VVB assessment

Date: 05/02/2025

The BM was corrected as per the TOOL07 and all mistakes mentioned above. Versions of EF 2019, 2020, 2021, 2022 and 2023 were also updated, jointly with the MR and ER spread sheet. The calculations were reviewed and were found corrected accordingly.

CAR is closed.

CAR ID	06	Section no.	ER spread sheet	Date: 04/12/2023
Description of CAR				
The ER calculation spread sheet was not provided.				
Project participant response				Date: 31/05/2024
ER Calculation spread sheet provided				
Documentation provided by project participant				
ER calculation spread sheet and EF Panamá 2021-2023				
VVB assessment				Date: 06/06/2024
1. The name of the project is incorrect 2. The ER are not CERs as this is not a CDM project. See cell C9.				
CAR remains open.				
Project participant response				Date: 14/01/2025
1. The name of the project is now corrected on the Impact Registry web site. 2. ER sheet updated.				
Documentation provided by project participant				
2. Panasolar PoA ER sheet V2.09.01.2025				
VVB assessment				Date: 19/01/2025

1. It has been included in tab "ER Calculation Summary" the name of the project as "Project Panasolar" but the actual name is "Panasolar Photovoltaic Project". Correction is necessary.
2. In tab "ER Calculation 2022" there are columns (E,F) with data which are not used in the calculation. Please eliminate them.
3. Please check tab "ER Calculation 2023" as it shows errors (row 38-41).

CAR remains open.

VVB assessment	Date: 25/01/2024
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1. Name of the project updated in the ER sheet
2. Tab "ER Calculation 2022" was updated.
3. Tab "ER Calculation 2023" was updated.

Documentation provided by project participant

ER calculation spreadsheet version 3, 24/01/2024

VVB assessment	Date: 26/01/2024
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1. Project name has been corrected. No further discrepancies were identified.
2. Unnecessary columns have been eliminated. No further discrepancies were identified.
3. Errors have been corrected. No further discrepancies were identified.

CAR is closed.

CAR ID	07	Section no.	3.6	Date:	04/12/2023
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Description of CAR

The following shall be corrected in section F of the MR:

No information of safeguard reporting has been included in the MR.

Project participant response	Date: 31/05/2024
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NA – Values are below estimates described in PDD

Documentation provided by project participant

VVB assessment	Date: 06/06/2024
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If values are below estimates described in the PDD (most of them were already ranked as low), this shall be fully demonstrated with evidence. Hence, it is required to demonstrate that the assessment in breaching the safeguard principles still remains low. Take into consideration that one safeguard principle was ranked as medium (#8) and mitigation measures were declared. Evidence of those shall be provided and also evidence that all others remain low.

CAR remains open.

Round 3

Project participant response	Date: 14/01/2025
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In the Safeguard reporting, Employees Trainings during this monitoring period is listed. It is reported that 2 trainings per year was done as specified on the PDD.

The ER Sheet was updated according to the generation reported by SCADA. The actual monitored result of energy generation is below compared to the ex-ante value (19,661 MWh).

Monitoring period results:

14/05/2019-31/12/2019: 7,162 MWh

01/01/2020-31/12/2020: 14,151 MWh

01/01/2021-31/12/2021: 14,589 MWh

01/01/2022-31/12/2022: 14,122 MWh

01/01/2023-30/11/2023: 14,799 MWh

The reasons why there was a generation lower than the ex-ante values were:

1. The actual radiation is lower than had been estimated
2. There were technical problems with one of the plant's transformers. Failures listed on section B.1. of MR.

Also, the project has shown records of employees that demonstrate that they are of an adequate age and that all of them are local hires.

Documentation provided by project participant

MR V2

VVB assessment

Date: 19/01/2025

Section F:

1. Information regarding energy generation and emission reduction has been included here but this is not related to the safeguard reporting.
2. Please provide information in the MR if other safeguard principles remain the same.

CAR remains open.

Project participant response

Date: 25/01/2024

1. Energy Generation and emission reduction was deleted
2. Information in the MR of other safeguards principles provided

Documentation provided by project participant

MR, V1.3

VVB assessment

Date: 26/01/2024

1. Unnecessary information has been eliminated. No further discrepancies were identified.
2. Missing information has been included. No further discrepancies were identified.

CAR is closed.

CAR ID	08	Section no.	3.6	Date: 04/12/2023
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Description of CAR

The following shall be corrected in section G of the MR:

No information regarding the grievance mechanism and inputs received have been included in the MR.

Project participant response	Date: 31/05/2024
<i>No grievances has being received during the monitoring period.</i>	
Documentation provided by project participant	
GS3556- Panasolar- Monitoring Report	
VVB assessment	Date: 06/06/2024
Information regarding the grievance mechanism has been provided. No grievances have been received during the monitoring period. This has been checked against the grievance book and cross check with interviews during project site visit. No discrepancies were identified. CAR is closed.	

CAR ID	09	Section no.	4	Date: 04/12/2023
Description of CAR				
The following records shall be provided: 1. Single Line Diagram 2. Photos of the electricity meters 3. Energy Meter Readings (raw data) 4. Energy Invoices (example of 1 month) 5. Calibration certificates covering the monitoring period 6. Operations Rules - "Reglamento de Operacion", published by the National Dispatch Center - "Centro Nacional de Despacho", February 2018 (source of the calibration frequency) 7. Operation License 8. Generation License 9. Environmental Approval 10. Energy Purchase Agreement 11. Description of the technology (technical data specifications) 12. List of jobs created 13. Payroll information of employees / Contracts with workers 14. Source of minimum salary in Panama. 15. Training regarding safe and healthy working conditions or other technical project implementation aspects 16. Purchase records of personal protective equipment (PPE). 17. Number of employees in skilled jobs, proportion of locally hired employees and number of training sessions 18. Evidence of the operation of tank in the local community 19. Grievance mechanism 20. Sources to calculate the EF				
Project participant response				Date: 31/05/2024

All documents provided	
Documentation provided by project participant	
VVB assessment	Date: 06/06/2024
All evidences were provided. No errors, miscalculations, omissions, misstatements, or incomplete information have been identified. CAR is closed.	

Table5 FAR from this verification

FAR ID	01	Section No.	N/A	Date: 04/12/2023
Description of FAR				
According to 3.1.8 of Transition Requirements (V2) the project developer shall submit the Transition Documentation to Gold Standard alongside the Verification Report. Subsequent verifications that occur after transition shall take into account the GS4GG Requirements (3.1.9). This shall be checked during next verification.				
Project participant response				Date: 31/05/2024
<i>We Will submit transition request.</i>				
Documentation provided by project participant				
-				
VVB assessment				Date: 06/06/2024
As stated in the transition requirements, v2, paragraph 3.1.8: <i>"No VVB review and opinion is required on documents submitted for Transition at Verification (i.e., the first verification that takes place after 01st March 2018). The VVB shall prepare the Verification Report as per the version of Gold Standard applicable to the project pre-transition. The Project Developer shall submit the Transition documentation to Gold Standard alongside the Verification Report (it is recommended to do this as early as possible in the Verification process to maximise time available to resolve any queries or clarifications). Gold Standard will review the submitted documents and raise clarifications or corrective actions to be resolved before Transition is approved. The approval decision shall be taken by Gold Standard, overseen by the Gold Standard's independent Technical Advisory Committee (TAC). The decision will be included in the Issuance Review documentation provided to the Gold Standard TAC and NGO Supporters.</i> PD shall submit the transition request form to the GS within this verification which is the 1st verification. For the 2nd verification, and as stated in paragraph 3.1.9: <i>"Subsequent Verifications that occur after transition shall take into account the GS4GG Requirements"</i> Thus, the VVB which takes the next subsequent verification shall take into account the GS4GG requirements.				

FAR ID	02	Section No.	Deviation DEVRQ-170	Date: 31/07/2025
Description of FAR				

A deviation has been requested by the PD on 30/06/2025 regarding the fulfillment of the maximal site visit requirement of 2 years after the start of the crediting period, according to the official document from GS "Applicability of Minimum Site Visit Requirements by VVB" (publication day 16/08/2021), paragraph 2.2.2 and 2.2.4. The deviation was approved on 31/07/2025.

As part of the deviation decision, the GS considered directions for the PD and the VVB. One of the directions cannot be assessed at the time of the current verification and shall be evaluated during next verification:

"Developer must ensure that all supporting documentation, including baseline conditions and monitoring data, are transparently presented and substantiated in the upcoming verification".

Project participant response	Date:
N/A	
Documentation provided by project participant	
N/A	
VVB assessment	Date: 18/08/2025
The VVB which takes the next subsequent verification shall take into account the GS4GG requirements:	
<i>"Developer must ensure that all supporting documentation, including baseline conditions and monitoring data, are transparently presented and substantiated in the upcoming verification".</i>	

"Developer must ensure that all supporting documentation, including baseline conditions and monitoring data, are transparently presented and substantiated in the upcoming verification".