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

Project Title:	42 MWp Bundled Solar Photovoltaic Power Project in Indonesia
Monitoring Period:	02/07/2019 to 31/12/2020 (Inclusive of both days)
GS project ID:	GS 7553
Internal ID:	9121
Customer:	Kosher Climate India Private Limited
Date:	16/10/2021
Revision:	02

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SUMMARY			
Reference No.	**Date** *(first version)*	**Version No.**	**Date** *(last version)*
A+SH_SYST_TQC 9121	05/07/2021	02	16/10/2021
GS4GG Verification			
GS4GG Certified Product *(sought)*:	GHG Emission Reductions		
GS4GG SDG Impact Statement *(sought)*:	Impact Certification		
General Information			
Client	Kosher Climate India Private Limited		
Project Title	42 MWp Bundled Solar Photovoltaic Power project in Indonesia		
Project Participants	PT Infrastruktur Terbarukan Adhiguna (ITA) PT Infrastruktur Terbarukan Buana (ITB) PT Infrastruktur Terbarukan Cemerlang (ITC) PT Infrastruktur Terbarukan Lestari (ITL)		
Project Location	Nusa Tenggara Barat Province and Sulawesi Utara Province, Indonesia		
Contact Person	Mr. Adi Natoatmadja		
Monitoring Period	02/07/2019 to 31/12/2020 (Inclusive of both days)		
GS4GG Version: GS4GG Principles and Requirements 1.2 GS4GG Activity Requirements: RE Activity Requirements Applied Methodology Version: ACM0002: Grid-connected electricity generation from renewable sources, Version 20.0 Current Methodology Version: ACM0002: Grid-connected electricity generation from renewable sources, Version 20.0	GS4GG Sectoral Scope: 2 UNFCCC CDM Sectoral Scope: 1 Technical Area: 1.2		
Published Monitoring Report Version: 01 Date: 03/03/2021	Final Monitoring Report Version: 02.1 Date: 14/10/2021		
Certified Project Design Document Version: 03 Date: 22/12/2020 GS Passport Version (if applicable): NA			
Estimated SDG Goals: SDG 3 (Good health and well-being): 3 community development activity/year SDG 7 (Affordable and clean energy): 64,504 MWh/annum SDG 8 (Decent work and economic growth): Employment for 80 no. of people per year, 02 nos. of training per year and 0.5 Million USD spent on O&M per year SDG 13 (Climate action): 60,310 tCO2e/annum			
Actual SDG Goals achieved during current monitoring period: SDG 3 (Good Health and Well-Being): 53 community development activity/year SDG 7 (Affordable and clean energy): 94,230 MWh/annum SDG 8 (Decent work and economic growth): Employment for 79 no. of people, 125 nos. of training provided and 0.8942 Million USD spent on O&M per year SDG 13 (Climate action): 85,939 tCO_2e			
Selected Sustainable Development Goals (SDGs): 3, 7, 8 and 13			
Verification Summary			
LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by PT Infrastruktur Terbarukan (ITA), PT Infrastruktur Terbarukan Buana (ITB), PT Infrastruktur Terbarukan Cemerlang (ITC) and PT Infrastruktur Terbarukan Lestari (ITL) to perform the periodical verification of "42 MWp Bundled Solar Photovoltaic Power project in Indonesia" (Ref. No. GS 7553) applying the			

methodology ACM0002, Version 20.0. The management of these four SPVs is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions.

A desk review and a remote audit have been conducted to verify the data submitted in the monitoring report. Applus+ Certification confirms the following have been reviewed:

a. The GS4GG PDD V03 including the monitoring plan;
b. Monitoring report(s);
c. The applied monitoring methodology;
d. Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board;
e. The Gold Standard for Global Goals "Principles and Requirements" Version 1.2 and GS4GG guideline and related Annex.
f. All information and references relevant to the project activity's resulting in emission reductions.

PT Infrastruktur Terbarukan (ITA), PT Infrastruktur Terbarukan Buana (ITB), PT Infrastruktur Terbarukan Cemerlang (ITC) and PT Infrastruktur Terbarukan Lestari (ITL) have implemented a **Greenfield "42 MWp Bundled Solar Photovoltaic Power project in Indonesia"** large-scale grid connected solar power project ("Project activity"). The project activity involves installation and operation of 42 MW Solar PV Projects in the Nusa Tenggara Barat Province and Sulawesi Utara Province of Indonesia.

Electricity generated from the project activity is exported to the Lombok and Sulutgo Power Grid. As per GS4GG PDD V03, the gross electricity generation from the project activity is estimated as 64,504 MWh/year and abates 304,551 tonnes of Carbon Dioxide emissions during its entire crediting period (02/07/2019 to 01/07/2024).

Applus+ Certification confirms that the project is implemented in accordance with the validated PDD V03. The monitoring plan complies with the applied methodology ACM0002 Version 20.0 /13/ and the Gold Standard for Global Goals "Principles and Requirements" Ver.1.2 /15/, GS4GG guideline 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 85,939 tCO_2e emission reductions during period 02/07/2019 to 31/12/2020 (Both days included).

ASSESSMENT TEAM		
Team Members	**Type of Resource**[1]	**Organization** *(for OEs)*
Lead Auditor: Mr. Pankaj Kumar	☐IR ☐EI ☒OE	M/s True Quality Certifications Private Limited
Technical Expert: Mr. Pankaj Kumar	☐IR ☐EI ☒OE	M/s True Quality Certifications Private Limited
Technical Reviewer: Mr. Simon Shen	☐IR ☒EI ☐OE	

***Note**: in line with the GS Rule Update RU 2020 PR – PR V1.2 dated on 02/04/2020, the VVB hereby discloses that the VVB has performed Validation of this project and has applied team rotation for the conduction of this Verification assessment according to the aforementioned requirement.*

[1] IR (Internal Resource); EI (External Individual); OE (Outsourced Entity)

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ABBREVIATIONS	
ACM	Approved Consolidated Methodology
AM	Approved Methodology
BM	Build Margin
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CER	Certified Emission Reduction
CL/CR	Clarification Request
CM	Combined Margin
CMP	Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol
DNA	Designated National Authority
DOE	Designated Operational Entity
EF	Emission Factor
EIA	Environmental Impact Assessment
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
GS4GG (or GS)	Gold Standard for Global Goals
IPCC	Intergovernmental Panel on Climate Change
KP	Kyoto Protocol
MP	Monitoring Plan
MR	Monitoring Report
NGO	Non-Governmental Organization
SDG	Sustainable Development Goal
TAC	Gold Standard Technical Advisory Committee
OM	Operational Margin
PDD	Project Design Document
PP	Project Participant
UNFCCC	United Nations Framework Convention for Climate Change
VVB	Validation and Verification Body
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 PT Infrastruktur Terbarukan (ITA), PT Infrastruktur Terbarukan Buana (ITB), PT Infrastruktur Terbarukan Cemerlang (ITC) and PT Infrastruktur Terbarukan Lestari (ITL) to perform the first periodical verification of "42 MWp Bundled Solar Photovoltaic Power project in Indonesia" applying the methodology ACM0002, Version 20.0 and GS4GG guidelines. 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 assess the compliance with the requirements of paragraph 62 of the CDM Modalities and Procedures as well as the GS4GG guidelines and relevant Principles and Requirements. According to this assessment Applus+ Certification shall:

- Ensure that the project activity has been implemented and operated as per the registered PDD and transitional documents for registration 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 CDM VVS for project activities version 02 for the project activity and Gold Standard i.e. and GS4GG requirements;
- Ensure that the actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan and the approved methodology;
- Evaluate the data recorded and stored as per the ACM0002 Version 20.0.

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 registered PDD V03 as well as its validation report, the applied monitoring methodology, relevant decisions, clarifications and guidance from the CMP and the EB, GS4GG guideline and any other information and references relevant to the project activity's resulting emission reductions. These documents are reviewed against the requirements of the Kyoto Protocol, the CDM Modalities and Procedures, GS4GG guideline and relevant Principles and Requirements, as well as their related rules and guidance.

Based on the requirements in the CDM VVS for project activities version 02 for the project activity as well as the GS4GG guideline, 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

PT Infrastruktur Terbarukan (ITA), PT Infrastruktur Terbarukan Buana (ITB), PT Infrastruktur Terbarukan Cemerlang (ITC) and PT Infrastruktur Terbarukan Lestari (ITL) has implemented a Greenfield "42 MWp Bundled Solar Photovoltaic Power project in Indonesia" (Project activity). The project activity involves installation and operation of 42 MW Solar PV Projects in the Nusa Tenggara Barat Province and Sulawesi Utara Province of Indonesia. The electricity generated from the project activity is exported to the Lombok and Sulutgo Power Grid. As per GS4GG PDD V03, the gross electricity generation from the project activity is estimated as 64,504 MWh/year and abates 304,551 tonnes of Carbon Dioxide emissions during its entire crediting period (02/07/2019 to 01/07/2024). The project has obtained requisite clearances and has already commissioned and was confirmed during interview with PP during remote audit.

Technical Description:
The project is a bundled project which involves installation of 4 solar projects having a total installed capacity of 42 MW and located in the Nusa Tenggara Barat Province and Sulawesi Utara Province of Indonesia.

No	Developer	Capacity	Location	Commissioning date	Grid Connected
1	PT Infrastruktur Terbarukan Adhiguna (ITA)	7 MWp/ 5.4 MWac	Cemporonan sub-village, Pringgabaya Utara village, Pringgabaya district, Lombok Timur regency, Nusa Tenggara Barat province, Indonesia	22/07/2019	Lombok (in West Nusa Tenggara)
2	PT Infrastruktur Terbarukan Buana (ITB)	7 MWp/ 5.4MWac	Geres Baret sub-village, Geres village, Labuhan Haji district, Lombok Timur regency, Nusa Tenggara Barat province, Indonesia	02/07/2019	
3	PT Infrastruktur Terbarukan Cemerlang (ITC)	7 MWp/ 5.4 MWac	Sengkol 1 sub-village, Sengkol village, Pujut district, Lombok	02/07/2019	

			Tengah regency, Nusa Tenggara Barat province, Indonesia		
4	PT Infrastruktur Terbarukan Lestari (ITL)	21 MW/ 15.3 MWac	Wineru Village, Likupang Timur District, Minahasa Utara Regency, Sulawesi Utara Province, Indonesia	05/09/2019	Sulutgo (in north Sulawesi and Gorontalo)

The technical features of the equipment's have been verified by the assessment team during remote audit and also cross checked with manufacturers technical manual which is detailed listed below:

Project	**ITA**	**ITB**	**ITC**	**ITL**
Solar PV modules				
Solar PV modules (Make)	Trina Solar	Trina Solar	Trina Solar	Trina Solar
Technology	Polycrystalline	Polycrystalline	Polycrystalline	Polycrystalline
Capacity	325 Wp	325 Wp	325 Wp	325 Wp
No. Of Modules	21,560	21,560	21,560	64,720
Capacity, MW (DC)	7.007 MWp	7.007 MWp	7.007 MWp	21.034 MWp
Inverter				
Input voltage of inverter	550 - 885 V	550 - 885 V	550 - 885 V	550 - 885 V
Rated output voltage of	380 V	380 V	380 V	380 V
Inverter output (min)	680 kWac	680 kWac	680 kWac	680 kWac
Number of Inverter	8	8	8	24
Total AC Capacity	5.44 MW	5.44 MW	5.44 MW	16.32 MW
Inverter Transformer				
Capacity	1.360 kVA	1.360 kVA	1.360 kVA	1.360 kVA
Input Voltage range	100 -380 V	100 -380 V	100 -380 V	100 -380 V
Output Voltage	20k V	20k V	20k V	20k V
Number of transformer	4	4	4	4
Power Transformer				
Capacity	NA	NA	NA	20 MVA
Input/ Output Voltage	NA	NA	NA	20 kV/66kV
Number of transformer	NA	NA	NA	1
Grid Connection				
Interconnection Voltage	20 kV	20 kV	20 kV	66 kV
Transmission line distance	3 km	6 km	2.1 km	0.2 km
Substation	150/20kV Pringgabaya	150/20kV Selong	150/20kV Sengkol	66/20kV Likupang
Total Capacity, MW (DC)	42 MWp			
Total Capacity, MW (AC)	32.6 MWac			

2. METHODOLOGY

Applus+ Certification 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's 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 used a periodical Verification Checklist which, 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, using the Verification Checklist, Applus+ Certification verified the implementation of the monitoring plan and the data presented in the Monitoring Report for the period in question. This involved interviewing PP representative during the remote audit 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 sectoral scope / technical area and experience in the sectoral or national business environment, LGAI Technological Center, S.A. (Applus+ Certification) has composed a project assessment team in accordance with the appointment rules in the internal Quality Management System of LGAI Technological Center, S.A. (Applus+ Certification).

The composition of audit team shall be approved by the LGAI Technological Center, S.A. (Applus+ Certification) ensuring that the required skills are covered by the team.

The four qualification levels for team members that are assigned by formal appointment rules are as presented below:

- Lead Auditor (LA)
- Auditor (A) / Auditor in Training (AiT)
- Technical Expert (TE)
- Technical Reviewer (TR)

The assessment team competence shall minimum consistent expertise of Lead Auditor (LA), Technical Expert (TE) and Technical Reviewer (TR). 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
Mr. Pankaj Kumar	LA/TE	YES	YES	NA	YES
Mr. Simon Shen	TR	YES	YES	NA	NA

The complete list of CVs is included as Appendix 3 of this report.

2.2 Document review

The Monitoring Report version 01 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 and verify that the applied methodology was carried out. Particular attention to the frequency of measurements, the quality of the metering equipment including calibration requirements, and the quality assurance and quality control procedures of the power plant was checked by the assessment team.
- 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.
- Please check section 4 of this report for detail of the documents checked.

2.3 On site assessment and follow up interviews

As a result of the COVID-19 pandemic, taking into account the rules of relevant national and local authorities (local to the VVB offices as well as to locality of the site visits), World Health Organization (WHO) recommendations, policies of the VVB and other relevant travel restrictions and guidance (for example, a requirement to self-isolate upon return from specific countries), the VVB has skipped the on site visit. As COVID -19 situation is going to stay for a while, and it seems that restoration of normal situation will take time and PP has requested to proceed with project verification as delay could have some financial implication on PP. Hence the site visit could not be postponed for this project activity

However as per the COVID 19 Interim Measures by GS4GG, the VVB may use alternative measures for auditing like remote audits. As per para 4.1.1 (b) of COVID 19 Interim Measures, Verification team has used the following alternative means for its assessment and to justify that they are sufficient for the purpose of verification of the PA. Along with desk review, audit team has conducted remote audit interview corresponding to the PA as follows:

A complete desk review of the MR and supportive evidences have been checked by the verification team.

- Verification team has performed Skype interview with PP in order to check implementation, current situation, evaluation of data management, QA/QC system, project technology, training provided, monitoring, calibration etc. Interview questions were filled as per Verification team interview checklist. Cross checks between information provided by interviewed personnel (i.e. by checking sources) to ensure that no relevant information has been omitted.

- Verification team has performed interview with randomly selected Local stakeholders to check the monitoring of GS sustainable parameters like employment and training, environmental and other relevant issues.

- Cross-check evaluation, for information received from interviews, under the scope of all information and references provided in the MR and supporting documents.

  Details of interviewees, topics covered and additional information presented below:

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Purnomosunu	Donni Yanuar	Manager, PT Energi Bayu Jeneponto	04/05/2021	Project implementation, Baseline emissions, ER calculations, Sustainable monitoring etc.	Mr. Pankaj Kumar
2	Nataatmadja	Adi	Head, HSE PT Energi Bayu Jeneponto	04/05/2021	Stakeholder meeting-Soil Erosion if any, Standard of Livings etc.	Mr. Pankaj Kumar
3	Negara	Adi	HSE Officer (O&M) PT Energi Bayu Jeneponto	04/05/2021	Stakeholder meeting- Employment opportunities, Standard of Livings etc.	Mr. Pankaj Kumar
4	Kumar	Narendra	Consultant Kosher Climate India Private Limited	04/05/2021	Stakeholder meeting- Noise pollution if any, Standard of Livings etc.	Mr. Pankaj Kumar
5	Dmail	Yuliana	Local stakeholder	04/05/2021	Stakeholder meeting- Noise pollution if any, Standard of Livings etc.	Mr. Pankaj Kumar
6	Suhendri	Arie	Local stakeholder	04/05/2021	Stakeholder meeting- Noise pollution if any, Standard of Livings etc.	
7	Kamiswara	Febria	Local stakeholder	04/05/2021	Stakeholder meeting- Noise pollution if any, Standard of Livings etc.	

The objective of the remote audit 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, Passport 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.
- Confirm the Sustainability monitoring plan as per the registered Passport
- To understand grievance (if any) from the villagers during the monitoring period.

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 Version 02. 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:

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

The assessment team shall raise a Clarification Request (CR) if information is insufficient or not clear enough to determine whether the applicable CDM/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.

Please refer Appendix 1 of this report. Total Numbers of CARs: CAR: 05, CL: 00, FARs: 00

2.6 Internal Quality Control

As a final step of verification, the final documentation including the verification report has to undergo an internal quality control by the Technical Reviewer. Each report has to be finally approved either by the VVB's Technical Manager or the Deputy. This approval process also includes another quality assurance check in terms of Administrative Review. In case one of these two persons is part of the assessment team, the final approval can only be given by the person who is not a part of the assessment team. If the documents have been satisfactorily approved, the Request for Issuance is submitted to the GS Registry along with the relevant documents.

3. VERIFICATION FINDINGS

3.1 FARs from Validation / Previous Verification

Two FARs were raised during design review which closed successfully in this verification. This is 1st periodic verification for the project activity.

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. The assessment team confirms, through the visual inspection that all physical features of the proposed project activity including data collecting systems and storage have been implemented in accordance with the validated PDD.

The project activity was in normal operational during the monitoring period and the same has been confirmed during the remote audit interviews. No unusual activates observed during the monitoring period and plant was undergone scheduled maintenance as per the recommendation of the manufactures. No forced breakdown observed and the same is confirmed by the assessment team with the plant log details.

Project Participants	PT Infrastruktur Terbarukan Adhiguna (ITA) PT Infrastruktur Terbarukan Buana (ITB) PT Infrastruktur Terbarukan Cemerlang (ITC) PT Infrastruktur Terbarukan Lestari (ITL)
Title of project activity	42 MWp Bundled Solar Photovoltaic Power project in Indonesia
GS Registration No.	GS 7553
GS Version applied	The project has been submitted to GS4GG as per the guidelines of Gold Standard for Global Goals "Principles & Requirements" Version 1.2. Hence the current verification of the project activity has followed the GS4GG version of the Gold Standard.

Baseline and monitoring methodology	ACM0002 Version 20.0 - Grid connected renewable electricity generation
Project type	The purpose of the project activity is to generate electricity using solar PV power technology. It is a 42 MW large-scale grid connected solar energy power project.
Project scale	Large
Location of the project activity	The project is located in Nusa Tenggara Barat Province and Sulawesi Utara Province of Indonesia
Project's crediting period	02/07/2019 to 01/07/2024 (1st Crediting Period)
Total duration of the project	5 years (Renewable crediting period)
Period verified in this verification	02/07/2019 to 31/12/2020 (Inclusive of both days)

Based on interview with PP representative the verification team was able to confirm that the project implementation is in accordance with the project description contained in the GS PDD (version 03, dated 28/01/2021)

The project activity is a 42 MW large-scale grid connected Solar Power project in Nusa Tenggara Barat Province and Sulawesi Utara of Province of Indonesia. The geo-coordinates of solar power plants in various locations have been provided below in table and the same was confirmed referring to the website Google maps/06/ and found to be correct.

Project	**Capacity**	**Region/Province**	**City/Town/Community**	**Geographical Location**
ITA	7 MWp	Nusa Tenggara Barat Province	Camporonan sub-village, Pringgabaya Utara village, Pringgabaya district, Lombok Timur regency	8.519° S 116.634° E
ITB	7 MWp	Nusa Tenggara Barat Province	Geres Baret sub-village, Geres village, Labuhan Haji district, Lombok Timur regency	8.658° S 116.574° E
ITC	7 MWp	Nusa Tenggara Barat Province	Sengkol 1 sub-village, Sengkol village, Pujut district, Lombok Tengah regency	8.794° S 116.294° E
ITL	21 MWp	Sulawesi Utara Province	Wineru Village, Likupang Timur District, Minahasa Utara Regency	1.658° N 125.096° E

The project activity (part of the project site) involves generation of electrical energy derived from solar energy. The baseline scenario identified is import of electricity from the grid.

Project activity involves installation and operation of 42 MW Solar Power Plants in Nusa Tenggara Barat Province and Sulawesi Utara Province of Indonesia.

The project has obtained the requisite clearances and has already commissioned on as verified from the review of relevant document /17/ and operating successfully /18/.

Project equipment and the technology are employed as mentioned in the registered PDD /10/.

The technical details of the project activity as confirmed during the interview on-site inspection explained in sec. 1.3 above.

The operation of the project activity complies with all statutory requirements as the PP is submitting the monthly invoice to government authorities.

The monitoring data is recorded on continuous basis and available on hourly/daily basis as ERP and MIS reports /18/ and stored at plant site.

Training has been provided to the operators on the technology and the monitoring of the plant operation, and the emergency and safety procedures. The company has recruited personnel with relevant experience in the operation of the plant.

There is no event or situation including emergency situations occurred during this monitoring period which has impacted the applicability of methodology/13/. The outage record or breakdown report/07/ for this monitoring period was discussed during the remote audit and verified from logbooks shared by PP and found OK.

The timeline of the project's implementation is as follows:

Milestone of the project activity	**Timeline**	**Assessment by the verification team**
Registration of the project activity under GS4GG Principles and Requirements version 1.2	22/12/2020	The end date of the review period "6 week registration review period under GS4GG version 1.2" i.e. 22/12/2020 has been considered as the registration date of the project activity and has been verified by the verification team from the review document
Crediting period		
1st Monitoring period	02/07/2019 to 31/12/2020	Verification team has verified same from the registered documents. Also, this monitoring period is within the first crediting period.

Assessment of actual emission reductions with the estimate emission reductions in PDD:

Estimated Emission Reduction as per registered PDD	60,310 tCO_2e As per PDD V03, ER for 365 days - 60,310 tCO_2e and for this MP, total days are 549. Accordingly, emission reduction for this MP, estimated ER is 90,713 tCO_2e. refer calculation in ER Spread sheet
Actual Emission Reduction for the monitoring period	85,939 tCO_2e
Is any increase of VERs occurred?	No

Reason for increase of VERs	NA

In summary, verification team confirms that actual emission reduction is lower than the estimate of the registered for the current monitoring period.

Verification team considers the project and monitoring description of the project contained in the Monitoring report to be complete and accurate. The Monitoring report complies with the relevant methodology, tools, forms and guidance which are in line with that available in the registered documents (including PDD) with Gold Standard.

Opinion:

a) In opinion of the assessment team the implementation and operation of the project activity is in compliance with the description in the PDD V03.

b) There is no revision in monitoring plan or post registration change for the current monitoring period.

c) The actual emission reductions for the current monitoring period are 85,939 tCO_2e which are lower than the estimated ERs (90,713 tCO_2e) for the comparable period.

3.3 Compliance of the Monitoring Plan with the Monitoring Methodology

The verification team is able to confirm that the monitoring plan contained in the PDD (version 03.0, dated 28/01/2021) is in accordance with the approved methodology applied by the project activity — ACM0002 Version 20.0 /13/ Consolidated baseline methodology for grid-connected electricity generation from renewable sources.

The monitoring plan and the monitoring system implemented are in compliance to the applied monitoring methodology ACM0002 Version 20.0. All other requirements of the applied methodology are met. Furthermore, it can be confirmed that the ex-ante value for grid emission factor (EF) sourced from latest data obtained from Directorate General of Electricity (Ministry of Energy and Mineral Resources or DNA Indonesia) for the province Lombok. The value in the registered PDD has been correctly applied in the calculation of emission reductions. The verification team confirms that the monitoring plan of the GS project activity complied with the applied methodology.

During the verification all relevant monitoring parameters (as listed in the PDD) have been verified with regard to the appropriateness of the applied measurement/determination method, the correctness of the values applied for ER calculation, the accuracy, and applied QA/QC measures.

Opinion:
The monitoring plan mentioned in the registered PDD is in line with the applied methodology i.e. — ACM0002 Version 20.0, Consolidated baseline methodology for grid-connected electricity

generation from renewable sources. The monitoring mechanism is in line with the methodology and is effective and reliable.

3.4 Completeness of Monitoring

The monitoring has been carried out in accordance with the monitoring plan contained in the PDD (version 03.0, dated 28/01/2021 /10/. During the course of verification, all relevant monitoring parameters have been verified with regard to the appropriateness of the applied measurement / determination method and applied QA/QC procedures. It is confirmed that the monitoring parameters have been measured / determined without material misstatements.

The verification team reviewed the actual monitoring during the interview during the remote auditand from document review and compared it against the requirements of the monitoring plan in the PDD /10/ and found in line.

The verification team assessed the monitoring techniques and each monitoring value in the monitoring report; and provided a short summary on the verification of every parameter listed in the monitoring plan and used for calculation of emission reductions.

a. Data and parameters fixed ex ante or at renewable of crediting period

$EF_{Lombok,CM,y}$ and $EF_{Sulutgo,CM,y}$ were mentioned as ex-ante fixed parameter.

The value for **$EF_{Lombok,CM,y}$ and $EF_{Sulutgo,CM,y}$** was considered from Directorate General of Electricity, Ministry of Energy and Mineral Resources, Indonesia published the 2016 - Emission Factor Reference Official Document which is the latest version available now. The value of grid emission factor for Lombok ($EF_{Lombok,CM,y}$) - 0.93 tCO_2/MWh and Sulutgo ($EF_{Sulutgo,CM,y}$) - 0.94 CO_2/MWh is considered as grid emission factor for the GS4GG project activity. The default value in turn is used for baseline calculation as per the formula given in the registered PDD for the current monitoring period. Assessment team checked the values, source of data, choice of data, purpose of the data mentioned in the MR from the registered PDD and confirms that the similar approach was considered for the current monitoring period also.

The relevant Emission factor values used for emission reduction calculation are as below. Also, as GS4GG "Principles and Requirements" V 1.2 the ex-ante fixed parameters are now connected to relevant SDG indicator which is acceptable to the assessment team.

$EF_{Lombok,CM,y}$ - Relevant SDG Indicator= SDG13: Climate Action= 0.93 tCO_2e/MWh
$EF_{Sulutgo,CM,y}$ - Relevant SDG Indicator= SDG13: Climate Action= 0.94 tCO_2e/MWh

b. Data and parameters monitored

Relevant SDG Indicator	SDG 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines

<table>
<tr><td></td><td>and vaccines for all</td></tr>
<tr><td>Data/parameter:</td><td>Good Health & Well being</td></tr>
<tr><td>Unit</td><td>Number</td></tr>
<tr><td>Description</td><td>Community Development Activities</td></tr>
<tr><td>Measured/calculated/default</td><td>Measured</td></tr>
<tr><td>Source of data</td><td>CSR records and photographic evidence</td></tr>
<tr><td>Value(s) of monitored parameter</td><td>53

<table><tr><th>Period</th><th>Number of community development activities</th></tr><tr><td>02/07/2019 to 31/12/2019</td><td>23</td></tr><tr><td>01/01/2020 to 31/12/2020</td><td>30</td></tr><tr><td>Total</td><td>53</td></tr></table></td></tr>
<tr><td>Monitoring equipment</td><td>Not Applicable</td></tr>
<tr><td>Measuring/reading/recording frequency:</td><td>Yearly once</td></tr>
<tr><td>Calculation method (if applicable):</td><td>Not Applicable</td></tr>
<tr><td>QA/QC procedures:</td><td>The data crosschecked annually with the CSR records by the consultant</td></tr>
<tr><td>Cross Checks</td><td>CSR records</td></tr>
</table>

<table>
<tr><td>Relevant SDG Indicator</td><td>SDG 7.2.1: Renewable energy share in the total final energy consumption</td></tr>
<tr><td>Data/parameter:</td><td>$EG_{facility,y}$</td></tr>
<tr><td>Unit</td><td>MWh</td></tr>
<tr><td>Description</td><td>Quantity of net electricity supplied to the grid during the year y.</td></tr>
<tr><td>Measured/calculated/default</td><td>Measured</td></tr>
<tr><td>Source of data</td><td>Monthly energy generation statement issued by PLN. These are called JMR (Joint Meter Reading) or BA-I</td></tr>
<tr><td>Value(s) of monitored parameter</td><td>94,230

<table><tr><th>Year</th><th>ITA</th><th>ITB</th><th>ITC</th><th>ITL</th><th>Total</th></tr><tr><td>Year 2019</td><td>6,521</td><td>6,787</td><td>6,158</td><td>10,142</td><td>29,609</td></tr><tr><td>Year 2020</td><td>11,637</td><td>12,192</td><td>11,204</td><td>29,587</td><td>64,621</td></tr><tr><td>Total</td><td>18,159</td><td>18,979</td><td>17,362</td><td>39,729</td><td>94,230</td></tr></table></td></tr>
<tr><td>Monitoring equipment</td><td>Monitoring equipment: Energy meters
Accuracy of Energy meters: 0.2
Monitoring Method: recording export & import in “generation statement”
This statement includes, monthly recording of electricity export & import.</td></tr>
</table>

	The detailed schedule of Calibration and energy meters used in project activity has been mentioned in Appendix 2
Measuring/reading/recording frequency:	Measurement: Continuous Recording: Monthly
Calculation method (if applicable):	Net electricity supplied will be calculated based on the difference between values of "export" and "import" on the energy meter at the sub-station (evacuation point). (Net Electricity = Export – Import) The net electricity will be calculated by PLN and provided in the monthly generation statement. Hence, the net electricity reading will be directly sourced from the monthly generation statement.
QA/QC procedures:	Net electricity supplied to the grid by the project activity has been cross checked with invoices. The energy meters are calibrated as per the minimum calibration frequency mentioned in the PDD.
Cross Checks	The value was cross checked between JMR, Invoices and site log book.

Relevant SDG Indicator	SDG 13.2.1: Climate Action
Data/parameter:	ER_y
Unit	tCO_2e/year
Description	Emission reductions achieved per year
Source of data checked by the assessment team	Emission reduction sheet
Value(s) of monitored parameter	85,939
Means of verification:	Assessment team checked that the parameter is calculated. The electricity exported & imported measured by Energy meter installed at substation. The JMR is cross-checked with the invoice copies. Emission reduction calculated in thus correct and accurate.
Cross check mechanism	All the formulas are applied in line with the registered GS4GG PDD

Relevant SDG Indicator	SDG 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value
Data/parameter:	Quantitative employment
Unit	• Number of O&M staffs involved in the project • Cost spent for O&M
Description	• Total employment generated due to the implementation of project activity and • The amount spent for O&M activities due to the project.
Measured/calculated/default	Measured
Source of data	Plant records or training records for all the employees/ Letter from O&M contractor for employment generation/ VVB interview with employees, local stakeholders etc.
Value(s) of monitored	79 employments generated and 0.8942 USD spent for O&M

<table>
<tr><td>parameter</td><td>Total no. of persons employed during this monitoring period provided by the PP was cross checked with plant records and through interviews. Further, the same has been crosschecked by the VVB during remote audit by means of attendance register and physical interviews and salary Slips. The Project thus provides employment opportunities, pays salaries and welfares, and helps to increase the income and living standards of the employees.
<table>
<tr><th>Period</th><th>Number of staffs</th><th>Cost Spent in O&M (Mn USD)</th></tr>
<tr><td>02/07/2019 to 31/12/2019</td><td rowspan="2">79</td><td>0.4313</td></tr>
<tr><td>01/01/2020 to 31/12/2020</td><td>0.4630</td></tr>
</table></td></tr>
<tr><td>Monitoring equipment</td><td>-</td></tr>
<tr><td>Measuring/reading/recording frequency:</td><td>Yearly once</td></tr>
<tr><td>Calculation method (if applicable):</td><td>The total number of persons working in the plant is calculated based on the daily log available at site.</td></tr>
<tr><td>QA/QC procedures:</td><td>The number of persons employed is mentioned in the plant register is crossed checked with attendance register. The information required for this parameter is being checked by VVB during remote audit through interview with people and through relevant supporting documents.</td></tr>
<tr><td>Cross Checks:</td><td>Employment records</td></tr>
</table>

<table>
<tr><td>Relevant SDG Indicator</td><td>8.6.1 Proportion of youth (aged 15-24 years) not in education, employment or training</td></tr>
<tr><td>Data/parameter:</td><td>Quality of employment</td></tr>
<tr><td>Unit</td><td>Number of Trainings provided to employees</td></tr>
<tr><td>Description</td><td>Training of Staff</td></tr>
<tr><td>Measured/calculated/default</td><td>Not Applicable</td></tr>
<tr><td>Source of data</td><td>Plant records or training records for all the employees/Letter from O&M contractor for employment generation/ VVB interview with employees, local stakeholders etc.</td></tr>
<tr><td>Value(s) of monitored parameter</td><td>125 trainings

PP has confirmed that a total no. of 125 trainings conducted during this monitoring period, year-wise details below:
<table>
<tr><th>Period</th><th>Number of Training provided</th></tr>
<tr><td>02/07/2019 to 31/12/2019</td><td>49</td></tr>
<tr><td>01/01/2020 to 31/12/2020</td><td>76</td></tr>
<tr><td>Total</td><td>125</td></tr>
</table>
VVB confirmed the details provided in MR with training register and the attendance sheet and also cross checked by conducting interviews during remote audit.</td></tr>
</table>

Monitoring equipment	Not applicable.
Measuring/reading/recording frequency:	Annually
Calculation method (if applicable):	-
QA/QC procedures:	The data crosschecked annually with the CSR records by the consultant.
Cross Checks:	Training records.

The verification team confirms;

a) The monitoring plan implemented is in line with monitoring plan included in approved GS4GG PDD.
b) The monitoring complies with the requirement of the applied methodology.
c) The information inflow (from data generation, aggregation, to recording, calculation and reporting) is included above under each parameter and confirms to the requirement of the approved PDD.
d) The values included in the monitoring report and corresponding emission reduction sheets are verified, cross checked and included under each monitoring parameter, wherever appropriate
e) The findings relevant to each parameter, wherever appropriate are discussed in detail in Appendix 1 of this report.

In summary, the verification team confirms that all the ex-post parameters are monitored in accordance with the approved monitoring plan and applied methodology.

c. Implementation of sampling plan

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

d. Compliance with the calibration frequency requirements for measuring instruments

The calibration details such as make, accuracy class serial number is as per the meter available onsite which was shared by PP and checked by verification team and found the details in line with approved PDD. The calibration details are presented in Appendix 2 of this report.

Assessment team checked the same and found that the calibration is appropriate and correct as traceability is ensured. The meters were calibrated as per the applicable norms and the meters are within the permissible error limit.

3.5 SDG Outcomes Monitoring

For Contributions to Sustainable Development

The verification team checked the sustainable development indicator parameters during the remote audit and interview.

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 guideline.

As per the sustainability monitoring plan in the approved PDD, verification team evaluated all sustainable development indicators as followed in the table:

Item	Baseline estimate	Project estimate	Net benefit
SDG 3: Good Health & Well being	-	Local development Activities: 53	Local development Activities: 53
SDG 7: Affordable and Clean Energy	-	94,230 MWh	94,230 MWh
SDG 8: Decent Work and Economic Growth	-	No. of employment opportunities created: 79 No. of trainings given: 125 O&M cost (USD): 0.8942	No. of employment opportunities created: 79 No. of trainings given: 125 O&M cost (USD): 0.8942
SDG 13: Climate Action	85,939 tCO_2e	**-**	85,939 tCO_2e

Comparison of actual value of outcomes with estimates in approved GS PD

Item	Values estimated in ex ante calculation of approved PDD	Actual values achieved during this monitoring period
SDG 3: Good Health & Well being	5 Local development Activities	Local development Activities: 53
SDG 7: Affordable and Clean Energy	97,021 MWh electricity generation	94,230 MWh electricity generation
SDG 8: Decent Work and Economic Growth	No. of employment opportunities created: 80 No. of trainings given:3 O&M cost (USD): 0.75	No. of employment opportunities created: 79 No. of trainings given: 125 O&M cost (USD): 0.8942
SDG 13: Climate Action	90,713 tCO_2e emission reduction	85,939 tCO_2e

The adequacy and compliance of the monitoring plan in the Monitoring report was found as per the requirements laid by the approved GS4GG PDD. The information flow (from data generation, aggregation, to recording, calculation and reporting) is already included under respective parameter above. The verification team has verified all the data and collected evidence as per the required monitoring frequency and found to be correct and appropriate meeting the requirements of the applied methodology and registered PDD.

As a part of continuous feedback from stakeholders, the grievances register is being placed at all project sites and is being continuously monitored and addressed through the grievances cell located centrally on regular basis and maintained in a register at company's site office. The comments received have been described in the Monitoring report along with the actions undertaken. The grievance register provide to verification team was also checked it was found that during the current monitoring period, no comments/feedbacks were received from the local stakeholders.

Also during the interview , Applus+ Certification conducted an interview with the project owner and local stakeholders please find the summary of the interview as below:

Sections	Debriefing
Trainings & salaries of the employees	During remote audit interview, Mr. Adi Natoatmadja, PP representative team was interviewed. It was noted that regular technical & nontechnical trainings were conducted and the salaries are in line with the industry standard.

VVB checked the registries of other GHG mechanisms (UNFCCC, VERRA) and confirmed that project is not registered under any other GHG mechanism and PP also provided an undertaking to confirm that there will be no double counting of emission reductions for the current monitoring period. Among the 4 project, ITL is also registered under International REC (I-REC) mechanism (Device ID: LIKUSP012) and the I-REC credits are issued during the following period

- From 01/12/2020 to 31/12/2020

PP do not claim GS VER for the above-mentioned period to avoid double counting.

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 guideline.

3.6 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 Monitoring report Version 01 & Monitoring report Version 02 and corresponding ER calculation spreadsheets and are consistent with the applied methodology ACM0002 20.0 and the monitoring plan contained in the registered PDD. The parameters are complete in this monitoring period.

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 Monitoring Report Version 02 and corresponding ER calculation spreadsheets. The verification process for

[2] https://evident.services/device-register/LIKUSP01

the same has been clearly described in above section of the report. See below for the detailed data:

Baseline Emissions for the amount of electricity supplied by project activity, BE_y is calculated as:

Project emissions:

Project Emissions, $PE_y = 0$

Emission reductions:

Calculation of baseline emission is as follows;
$BE_y = EG_{PJ,y} \times EF_{grid,CM,y}$

Where,
BE_y = Baseline emissions in year y (tCO_2/yr)

$EG_{PJ,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y in MWh

$EF_{grid,CM,y}$ = Combined margin CO_2 emission factor for grid connected power generation in year y i.e. 0.93 tCO_2/MWh and 0.94 tCO_2/MWh

As per para 41 of ACM0002, Version 20.0, when the project activity is installation of Greenfield power plant, then:
$EG_{PJ,y} = EG_{facility,y}$

Where,
$EG_{facility,y}$ = Quantity of net electricity generation supplied by the project plant/unit to the grid in year y (MWh/yr)

The summary of Emission Reduction (tCO_2) is computed as below:

Year	Net Generation (MWh)	Grid Emission Factor (tCO_2/MWh)	Baseline emission (tCO_2)	Emission Reduction (tCO_2)
ITA				
Year 2019	6,521	0.93	6,064	6,064
Year 2020	11,637	0.93	10,822	10,822
ITB				
Year 2019	6,787	0.93	6,312	6,312
Year 2020	12,192	0.93	11,338	11,338
ITC				
Year 2019	6,158	0.93	5,726	5,726
Year 2020	11,204	0.93	1,0419	1,0419
ITC				
Year 2019	10,142	0.94	95,33	95,33
Year 2020	27,367	0.94	25,725	25,725
Total	**94,230**		**85,939**	**85,939**

3.7 Management and Operational System

The responsibilities of data measurement, collection, verifying, archiving etc. have been clearly defined in the approved PDD V03. The same practice is followed onsite and it is confirmed by the assessment team during the verification remote audit. 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 the remote audit, the monitoring procedure as well as the internal quality management and control procedures are stipulated in the PDD. 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 (training register and attendance sheet) 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 soft copies, will be kept for two years after the end of the last crediting period or the last issuance of GS VERs for this Project, whichever occurs later.

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4. REFERENCE

LIST OF DOCUMENTS	
S. No.	**Document/Evidence/Reference/Web link, Version, Date**
/01/	GS MR 7553 Version 01
/02/	GS MR 7553 Version 02.1
/03/	Emission reduction Sheet version 01
/04/	Emission reduction Sheet version 02.1
/05/	Joint Meter Reading (JMR)/ Invoices
/06/	Actual geo-coordinates
/07/	Break Down details of plant
/08/	Calibration certificates
/09/	Training record
/10/	Registered PDD
/11/	EHS Policy
/12/	GS registered Validation Report
/13/	ACM0002 Version 20.0 Methodology
/14/	CDM VVS version 02 for the project activities
/15/	The Gold Standard for Global Goals "Principles and Requirement" V 1.2
/16/	Employment records
/17/	Commissioning certificates for the power plant
/18/	Log book records for scheduled maintenance of the power plant for the complete monitoring period
/19/	Grievance register
/20/	CSR records
/21/	CSR Policy
/22/	Project O&M HSE logbook, or interview with maintenance staff

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5. FINAL VERIFICATION STATEMENT

Applus+ Certification has been engaged by PT Infrastruktur Terbarukan Adhiguna to perform the 1st periodical verification of the "42 MWp Bundled Solar Photovoltaic Power project in Indonesia"

The management of PT Infrastruktur Terbarukan (ITA), PT Infrastruktur Terbarukan Buana (ITB), PT Infrastruktur Terbarukan Cemerlang (ITC) and PT Infrastruktur Terbarukan Lestari (ITL) 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 Ver. 03 and the applied methodology ACM0002 Version 20.0.

Our verification approach was based on the requirements as defined under the Kyoto Protocol, Marrakesh accord, as well as those defined by the CDM Executive Board and Gold Standard. 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 approved GS4GG project design document;
- the monitoring plan is as per the applied methodology;
- the monitoring in Monitoring Report is as per the PDD and the monitoring plan approved by GS4GG;
- 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 is calibrated appropriately;
- 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 "42 MWp Bundled Solar Photovoltaic Power project in Indonesia" for the monitoring period 02/07/2019 to 31/12/2020 (Both days included) 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:	02/07/2019 to 31/12/2020 (Both days included)

Verified emissions in the above reporting period:

Leakage emissions	0 tCO_2e equivalents
Project emissions	0 tCO_2e equivalents
Baseline emissions	85,939 tCO_2e equivalents
Emission reductions	85,939 tCO_2e equivalents

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Date: 16/10/2021

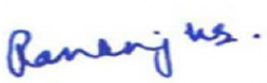
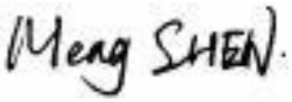
Lead Auditor: Mr. Pankaj Kumar

Tech. Expert: Mr. Pankaj Kumar

Tech. Reviewer: Mr. Simon Shen

Approver *(Applus+ Certification VVB Technical Manager)*

Mr. Agustín Calle de Miguel

ASSESSMENT TEAM	
Lead Auditor: Mr. Pankaj Kumar	**Technical Reviewer:** Mr. Simon Shen
Signature: 	Signature: 
Approver: Mr. Agustín Calle de Miguel	
Signature: 	

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Appendix 1: Corrective Action Request/Clarification Request/Forward Action Request resolution table

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	01
Raised by:	Pankaj Kumar	Ref. to checklist in above tables:	A.1
Description of the audit finding		Date:	26/05/2021
1. Under Key Project information section of MR, value of SDG goal 7 achieved during the current monitoring period is not consistent with ER sheet. 2. PD shall provide commissioning certificates of all 4 plants in the project 3. In sec. A.1, duration of MP is not consistent with the KPI section			
Project Participant's response		Date:	14/06/2021
1. The SDG 7 value is corrected in Key Project information section of MR. 2. The commissioning certificates of all 4 plants in the project are submitted now 3. In sec. A.1, duration of MP is not consistent with the KPI section			
Documentation provided as evidence by Project Participant			
Revised MR Commissioning Certificates			
Auditor's assessment comment		Date:	30/06/2021
1. PP has now updated the value of SDG 7 in Key Project information section of revised MR Ver.02 dated 14/06/2021. Hence, **comment closed.** 2. PP has submitted the commissioning certificates of all 4 plants to VVB. The same is checked by VVB and found appropriate. Hence, **comment closed.** 3. PP has now updated duration of MP in sec. A of revised MR Ver.02 dated 14/06/2021. Hence, **comment closed.**			

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	02
Raised by:	Pankaj Kumar	Ref. to checklist in above tables:	C
Description of the audit finding		Date:	26/05/2021
1. In sec. C, monitoring system description refers to some wind Power project. PD shall clarify 2. PP shall also provide PPA signed with PLN (State utility)			
Project Participant's response		Date:	14/06/2021
1. In sec. C, the reference to wind Power project has been included by mistake. The reference to WTGs is removed now. 2. PPA of all the projects has been submitted.			
Documentation provided as evidence by Project Participant			
Revised MR PPAs			

Auditor's assessment comment	Date:	30/06/2021
1. PP has edited the details of the power plant as per the project activity in Sec. C of revised MR Ver.02 dated 14/06/2021. Hence, **comment closed.** 2. PP has submitted PPA of all the projects, the same is checked by VVB and found appropriate. Hence, **comment closed.**		

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	03
Raised by:	Pankaj Kumar	Ref. to checklist in above tables:	D.2, E.2, E.1
Description of the audit finding		Date:	26/05/2021
1. In sec. D.2, total no. of jobs provided in each vintage are 79. PD shall clarify whether 79 people employed in each vintage or this number refers to entire monitoring period? 2. In sec. E.1, value of SDG 13 not consistent with ER sheet and value of SDG 7 is also not consistent with KPI section			
Project Participant's response		Date:	14/06/2021
1. In sec. D.2, The 79 people employed were employed at any point of time during the monitoring period. Hence, it is reported in all the vintage period in the MR. 2. In sec. E.1, value of SDG 13 & SDG 7 is corrected now.			
Documentation provided as evidence by Project Participant			
Revised MR			
Auditor's assessment comment		Date:	30/06/2021
1. PP has clarified that a total of 79 employments are generated due to the project activity during the entire monitoring period. Hence, **comment closed.** 2. PP has updated the values of SDG 7 and SDG 13 in the revised MR Ver.02 dated 14/06/2021. Hence, **comment closed.**			

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	04
Raised by:	Pankaj Kumar	Ref. to checklist in above tables:	F
Description of the audit finding		Date:	26/05/2021
1. PD shall provide copy of ESIA report 2. PD shall also provide 6 monthly monitoring report (AMDAL-EIA) submitted to environment office on province and regency level 3. PD shall also provide E&S monitoring report to ADB			
Project Participant's response		Date:	14/06/2021
1. The ESIA report is submitted now 2. PD shall also provide 6 monthly monitoring report (AMDAL-EIA) is in Bahasa Indonesia. Hence, the E&S monitoring report submitted to ADB has been provided. All the details in the AMDAL-EIA is also covered in the E&S monitoring report. 3. The E&S monitoring report to ADB has been provided.			

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Documentation provided as evidence by Project Participant		
ESIA reports E&S monitoring report		
Auditor's assessment comment	Date:	30/06/2021
1. PP has submitted the ESIA report to VVB and the same is checked for details on addressing environmental and social issues. Hence **comment closed.** 2. PD shall also provide 6 monthly monitoring report (AMDAL-EIA) is in Bahasa Indonesia. Hence, the E&S monitoring report submitted to ADB has been provided. All the details in the AMDAL-EIA is also covered in the E&S monitoring report. in the revised MR Ver.02 dated 14/06/2021. Hence, **comment closed.** 3. PP has submitted E&S monitoring reports to VVB and found appropriate. Hence, **comment closed.**		

Type:	☐ CAR ☒ CL/CR ☐ FAR	Number:	05
Raised by:	Pankaj Kumar	Ref. to checklist in above tables:	
Description of the audit finding		Date:	26/05/2021
PP shall provide scanned copy of grievance register.			
Project Participant's response		Date:	14/06/2021
The grievance register is maintained in soft copy only. The same is submitted now.			
Documentation provided as evidence by Project Participant			
Grievance register			
Auditor's assessment comment		Date:	30/06/2021
Grievance register provided by PP and VVB confirmed that no grievances received during this monitoring period. **Comment closed.**			

FARs raised during Design Review

Type:	☐ CAR ☐ CL/CR ☒ FAR	Number:	1, 2
Raised by:	Pankaj Kumar	Ref. to checklist in above tables:	
Description of the audit finding		Date:	26/05/2021
FAR#1 The verifying VVB shall check the double counting of credits and confirm that the credits are not being claimed for the same GHG emission reduction under any other market mechanisms (Carbon and Renewable Energy Certificate). FAR#2 The applied simplified procedure to demonstrate additionality, hence shall provide information on actual capital cost of the project activity at the time of the first verification.			
Project Participant's response		Date:	14/06/2021
Documentation provided as evidence by Project Participant			
Grievance register			

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Auditor's assessment comment	Date:	30/06/2021
FAR #1 : PP has provided an undertaking regarding double counting and details about exclusion of duration for the period claimed under I-REC provided in MR. VVB assessed the same and found them correct and appropriate. FAR closed. FAR#2: PP has provided the actual cost of the project activity in section B.1 of MR. The audited financial report is verified and found that the project cost provided by PP is correct. FAR closed		

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Appendix 2: Calibration details of monitoring meters

Project	Meter Number	Accuracy class	Calibration date	Validity
ITA	217083977	0.2	02/03/2018	01/03/2023
ITB	218247076	0.2	02/03/2018	01/03/2023
ITC	218247075	0.2	02/03/2018	01/03/2023
ITL	MW-1807A438-02	0.2	12/12/2018	11/12/2023

Appendix 3: Audit Team CVs

Name	SHORT CV. BACKGROUND INFORMATION
Mr. Pankaj Kumar	Mr. Pankaj Kumar has done M. Sc in Environment Management from Forest Research Institute, Dehradun and B. Sc. (Hons.) in Environment & Water Management from Magadh University, Bihar, India. He has also done Post Graduate Diploma in Environmental Law from NLSIU, Bangalore. He has more than 12 years of working experience in GHG Assessments and has participated during his career in Agencies and DOEs like MITCON, Agrinergy, Carbon Check and is empanelled with Applus+ Certification since 2015 for the performance of CDM/VCS/GS project assessments. He has extensive experience in the Renewable, Waste Management and Energy Demand Scopes of UNFCCC CDM and has done more than 100 Validations and Verifications of PAs and PoAs as Lead Auditor, Technical Expert and Technical Reviewer, mainly in Asia, Africa, USA, Asia Pacific and Americas under CDM, Verified Carbon Standard, Gold Standard & Social Carbon Standard, Brazil. He is an experienced, qualified and result oriented Environment and climate change professional having 16 yrs. of relevant experience in Climate Change (Mitigation & Adaptation), Environmental Due Diligence, Disaster Risk Reduction, Climate finance, adaptation planning, capacity building, validation and verification of GHG project. He can also provide technical support for environmental investigative, remedial projects involving air, water and soil, Waste management, EIA, Environmental Compliance, ISO 14001, OHSAS 18001, GHG accounting (ISO 14064) and Carbon foot printing.
Mr. Simon Shen	Mr. Simon Shen has Master degree in Thermal Enrgy Engineering, Bacheor Degree in Environment Engineering) is a Lead Auditor appointed by Applus+ LGAI for the GHG project assessment. He is based in Shanghai. He has several years of work experience in environment protection field. Before he joined Applus+ LGAI, he had been worked for TUV SUD as a GHG Validator/ Assessment team and ISO 9001/ 14001 Lead Auditors for 3.5 years.