GOLD STANARD FOR THE GLOBAL GOALS （GS4GG） VERIFICATION REPORT

PROJECT TITLE: HUNAN GUANBAODU-LIANGJIANGKOU SMALL-SCALE HYDROPOWER BUNDLE PROJECT

GS4GG PROJECT NO.: 835

CLIENT NAME: CLIMATE BRIDGE (SHANGHAI) LTD.

VERSION AND DATE: VERSION 03, 24/01/2024

CHINA CERTIFICATION CENTER, INC.

Floor 6 Taiji Commercial Building, No. 211 Beisihuan Zhonglu, Haidian District, Beijing, P.R. China

Project Name: Hunan Guanbaodu-Liangjiangkou Small-scale Hydropower Bundle Project	
Certification body: China Certification Center, Inc.	
Client: Climate Bridge (Shanghai) Ltd.	
Date of this revision: 24/01/2024	**Version No.**: Version 03
GS4GG Project No.: 835	**Host Country:** People's Republic of China
Methodology Applied: ACM0002 "Grid-connected electricity generation from renewable sources" Version 16.0	
Monitoring Period: 01/01/2022 to 31/12/2022 (first and last days included)	
Activity Requirements applied: Renewable Energy Activities	
Product Requirements applied: GHG Emissions Reduction & Sequestration	

Verification Summary:

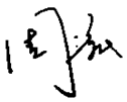
China Certification Center, Inc. (CCCI) has performed the periodic verification of Hunan Guanbaodu-Liangjiangkou Small-scale Hydropower Bundle Project (hereafter referred as 'the Project'), GS4GG Project Number 835, covering the monitoring period 01/01/2022 to 31/12/2022. The verification was performed on the basis of GS4GG criteria, UNFCCC approved Methodology ACM0002 Version 16.0, and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The verification consisted of the following three phases: i) desk review of the project design, monitoring report and additional background documents; ii) online follow-up interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion.

CCCI has verified the project Monitoring Report Version 01 dated 06/06/2023 /2/ for the monitoring period as indicated above. CCCI confirms that the Project is implemented as described in the registered Project Design Document for Gold Standard for the Global Goals Voluntary Offset projects. Installed equipment being essential for generating and measuring emission reductions run reliably and are calibrated appropriately. The monitoring system is in place and the Project is generating SDG impacts as a GS-VER project.

CCCI can confirm that the SDG impact are calculated without material misstatements. Our opinion relates to the Projects' SDG impact reported and related to the validated and registered project baseline, monitoring plan and its associated documents. Based on the evidence and information that are considered necessary to guarantee that SDG impact are appropriately calculated, CCCI confirms the following statement:

SDG Impact	**11th MP**
	01/01/2022 to 31/12/2022
SDG5 - Number of women employees	5 women employees
SDG7 - MWh of renewable energy generated	22,508.696 MWh/year renewable power generation
SDG8 - Number of job positions and training opportunities	17 of job positions and 5 training opportunities
SDG8 - Salary level	Salary level of 4,205 CNY/month
SDG13 – Emissions Reductions	GHG emission Reductions 13,466 t GS VERs

Work carried out by:	Team Leader: Ms. Guo Jiayuan Verifier: Ms. Hong Dandan
Technical Review by:	Ms. Li Yiting
Name, position and signature of the approver of the verification report	Mr. Zhou Hong, Director of GHG Department 

Abbreviations

AM	Approved Methodology
BE	Baseline emissions
CAR	Corrective Action Request
CCCI	China Certification Center, Inc.
CCPG	Central China Power Grid
CDM	Clean Development Mechanism
CL	Clarification Request
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
CP	Crediting Period
DNA	Designated National Authority
EB	Executive Board
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GHG	Green House Gas(es)
GS4GG	Gold Standard for the Global Goals
ILO	International Labour Organization
IPCC	Intergovernmental Panel on Climate Change
LE	Leakage emissions
LSC	Local Stakeholder Consultation
MoV	Means of Verification
MP	Monitoring Plan/Monitoring Period
MR	Monitoring report
ODA	Official Development Assistance
PD	Project developer
PDD	Project Design Document
PDR	Preliminary Design Report
PE	Project Emission
PP	Project Participant
SD	Sustainable Development
SDG	Sustainable Development Goals
tCO_2e	Tonnes of Carbon di oxide equivalent
UNFCCC	United Nations Framework Convention on Climate Change
VER	Voluntary Emission Reduction
VVB	Validation and Verification Body
VVS	Validation and Verification Standard

Table of Contents

1. INTRODUCTION

Climate Bridge (Shanghai) Ltd. has commissioned CCCI to verify the emission reductions of the GS4GG project "Hunan Guanbaodu-Liangjiangkou Small-scale Hydropower Bundle Project", for the 11th monitoring period which belongs to the 2nd crediting period (CP2) from 01/01/2022 to 31/12/2022, located in Jingzhou County and Tongdao County, Huaihua City, Hunan Province, P.R. China.

This report summarizes the findings of the verification of the Project, performed on the basis of Gold Standard for the Global Goals (GS4GG) requirements, UNFCCC criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

1.1. Objective

The objective of the verification is to provide a through and independent third party assessment of the registered project activity. In particular, the assessment shall:

(a) Ensure that all sustainability development (SD) indicators and mitigation measures have been monitored and implemented in accordance with the registered PDD and transition annex;
(b) Ensure that the project activity has been implemented and operated as per the registered PDD or any approved revised PDD, and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place;
(c) Ensure that the monitoring report and other supporting documents provided are complete in accordance with the latest applicable version of the completeness checklist for requests for issuance of Amount of GHGs emission avoided or sequestered and verifiable and in accordance with applicable GS4GG requirements;
(d) Ensure that the actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan or any revised approved monitoring plan, and the approved methodology including applicable tool(s);
(e) Evaluate both quantitative and qualitative information on emission reductions provided in the project documentation;
(f) Evaluate the data collection system meets the requirements of the monitoring plan as per the applied methodology including applicable tool(s) and, where applicable, the applied standardized baseline.

1.2. Scope

The verification scope covers the relevant documents (e.g. the registered PDD including sustainable development requirements, the Monitoring Report, the emission reduction calculation spreadsheet, supporting documents available to the verifier and information collected through performing interviews and on-site assessment, GS4GG's tools and guidelines publicly available, relevant rules, including the host country legislation, etc.) to be independently reviewed, the project geographical locations to be visited, the project relevant personnel to be interviewed with, and processes that are necessary to acquire objective evidence for the evaluation of the project compliance to the GS4GG verification requirements.

The above verification activities are conducted according to the GS4GG requirements as following list,

(i) the Gold Standard for the Global Goals Principles and Requirements/33/,

(ii) the Gold Standard for the Global Goals Safeguarding Principles & Requirements/34/,
(iii) the Gold Standard for the Global Goals Community Services Activity Requirements/35/,
(iv) the Gold Standard for the Global Goals Stakeholder Consultation and Engagement Requirements /36/,
(v) the Gold Standard for the Global Goals GHG Emissions Reduction & Sequestration Product Requirements/37/,
(vi) the Gold Standard for the Global Goals Validation and Verification Standard/38/,
(vii) Validation and Verification Body requirements, Product requirements and references relevant to the project activity's reported emission reductions

In doing so, the principles of accuracy, completeness, relevance, reliability and credibility were followed.

The verification is not meant to provide any consulting service towards the PPs. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project.

1.3. GS Project Description

The project activity is a renewable hydro electricity generation project activity that will displace electricity generation in the Central China Power Grid (CCPG), displacing fossil fuel dominated electricity generation and thus resulting in greenhouse gases emission reductions.

The project is a grid connected hydro power project with a total installed capacity of 5.89MW (4MW+1.89MW). The bundled project includes 2 small-scale hydro power generation projects as follows:

The Guanbaodu project is located on Qushui River. The installed capacity is 4 MW (1MW×4), and the annual net electricity generation is estimated to be 15,513 MWh. The surface area of the full reservoir is 327,000 m^2, thus the power density of Guanbaodu is 12.23 W/m^2. The operation of Guanbaodu project displaces equivalent power generated from CCPG which is mainly dominated by fossil fuel fired power plants. It helps to reduce greenhouse gas (GHG) emissions by an estimated annual average of 9,281 tCO_2e per year during the second crediting period. The main construction of Guanbaodu project consists of a dam, a power house and a switch station. The generated electricity is delivered to the Gantang Substation via a 35kv power transmission line, then delivered to Jingzhou Power Grid, and finally connected to CCPG.

The Liangjiangkou project is located on Tongdao River. The installed capacity is 1.89 MW (0.63MW×3), and the annual net electricity generation is estimated to be 6,099 MWh. The surface area of the full reservoir is 177,500 m^2, thus the power density of Liangjiangkou is 10.65 W/m^2. The operation of Liangjiangkou project displaces equivalent power generated from CCPG which is mainly dominated by fossil fuel fired power plants. It helps to reduce greenhouse gas (GHG) emissions by an estimated annual average of 3,649 tCO_2e per year during the second crediting period. The main construction of Liangjiangkou project consists of a dam, a power house, a booster substation and a tail water channel. The generated electricity is delivered to the Xianxi Substation via a 35kv power transmission line, and finally connected to CCPG.

The project activity uses renewable hydro energy to generate electricity displacing fossil fuel dominated electricity generation in CCPG and thus resulting in greenhouse gases emission reductions.

The estimated emission reduction from the project is 12,930 tCO_2e per year during the 2nd renewable 7-year crediting period and the Certified emissions reduction for the current monitoring period from 01/01/2022 to 31/12/2022 is 13,466 tCO_2e.

Item	Capacity	Location	Geo-coordinates of the center
Guanbaodu project	4MW	Jingzhou County, Huaihua City, Hunan Province, P.R. China	N 26°40'38" E 109°44'09"
Liangjiangkou project	1.89MW	Tongdao County, Huaihua City, Hunan Province, P.R. China	N 26°13'11" E 109°47'45"

The Guanbaodu project has started construction in August 2005 and Liangjiangkou project has started construction in August 2006.

The Guanbaodu and Liangjiangkou project both have started fully operation in January 2008.

Project's 1st crediting period: 01/01/2009 to 31/12/2015

Project's 2nd crediting period: 01/01/2016 to 31/12/2022 (Renewable)

Monitoring Period to be verified: 11th 01/01/2022 to 31/12/2022 (first and last days included) which belongs to 2nd crediting period.

1.4. Verification Team

The verification team consists of the following personnel:

FUNCTION	NAME	TA 1.2	TASK PERFORMED*
Team Leader	Ms. Guo Jiayuan	☒	☒**DR** ☐**SV** ☒**RI** ☐**TR**
Verifier	Ms. Hong Dandan	☒	☒**DR** ☒**SV** ☒**RI** ☐**TR**
Internal Technical Reviewer (ITR)	Ms. Li Yiting	☒	☐**DR** ☐**SV** ☐**RI** ☒**TR**

*DR = Document Review; SV = On-site Visit; RI = Report issuance; TR = Internal Technical Review

2. VERIFICATION PROCESS

CCCI has assessed and determined that the implementation and operation of the project activity, and the steps taken to report SDG impacts comply with the GS4GG criteria, rules and relevant guidance provided by the SustainCert or GS. The audit involved a document review of relevant documentation, a site visit, raise the resolution of the findings and finish the final report and technical review which has been elaborated in below sections.

2.1. Review of Documents

A desk review of the MR (Version 01, dated 06/06/2023) /2/ and supporting documents were conducted by the verification team. The aim of the desk review of the documentation is to verify the completeness of the data and the information presented, to carry out the compliance check of the MR with respect to the monitoring plan, the applied methodology including applicable tool(s) and, where applicable, the applied standardized baseline. Particular attention was given to the frequency of measurements, the quality of the metering equipment including calibration requirements, and the quality assurance and quality control procedures. The evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions was also conducted.

The verification team has checked for double counting by reviewing all relevant registries that could hold emission reductions from the project activity, such as CDM (http://cdm.unfccc.int), VCS (http://www.v-c-s.org/), CCER (http://cdm.ccchina.org.cn/ccer.aspx), IREC (https://www.irecstandard.org/#/), ICAP (https://icapcarbonaction.com/zh/), and confirmed the project has not been registered as CDM, CCER, VCS project or under other voluntary carbon crediting scheme which is confirmed by checking the PDD /1/ and validation report /4/.

The additional background documents related to the registered PDD /1/, validation report /4/, previous verification reports /5/ and etc., formed the basis of the final conclusion were as presented in Section 4 of this report.

Section 6 of this report contains a complete list of all documents and proofs reviewed by the verification team.

2.2. On-site Visit

Through the on-site visit of the project site, the verification team has checked the project equipment, monitoring devices, interviewed with key personnel of the project owner, operation staffs, the representatives of local stakeholders. The detail of the site visit assessment including the interviewees and the main topics of the interview are summarized in the following table.

No.	Interviewee			Date	Subject
	Last name	First name	Affiliation		
1.	Li	Jing	Jingzhou Miao & Dong Autonomous County Guanbaodu Hydropower Co., Ltd. /	04/07/2023	- General aspects of the project - Changes since validation / previous verifications - Calibration procedures - Power generation situation - Quality management system

No.	Interviewee			Date	Subject
	Last name	First name	Affiliation		
			Guanbaodu Plant Chief		- Involved personnel and responsibilities
2.	Gao	Tianjing	Jingzhou Miao & Dong Autonomous County Guanbaodu Hydropower Co., Ltd. / Guanbaodu Plant secretary	04/07/2023	- Training and practice of the operational personnel - Implementation of the monitoring plan - Monitoring data management - Data uncertainty and residual risks - Procedural aspects of the verification - Maintenance - Environmental aspects - Job opportunities - Salary level - Water quality and quantity - Solid waste - Biodiversity - Livelihood of the poor - Access to energy service
3.	Kuang	Qiuxiang–Female	Jingzhou Miao & Dong Autonomous County Guanbaodu Hydropower Co., Ltd. / Guanbaodu Accountant	04/07/2023	
4.	Su	Jing	Jingzhou Miao & Dong Autonomous County Guanbaodu Hydropower Co., Ltd. / Guanbaodu Plant Operation Staff	04/07/2023	
5.	Da	Shikui		04/07/2023	
6.	Lin	Chunyan–Female	Jingzhou Miao & Dong Autonomous County Environment Protection Bureau/ Section Chief	04/07/2023	- Water quality and quantity - Solid waste - Biodiversity - Livelihood of the poor - Management Regulation of Environment and Health
7.	Xu	Yufeng – Female	local resident	04/07/2023	- Water quality and quantity - Solid waste - Biodiversity - Livelihood of the poor
8.	Wu	Youping			
9.	Su	Renbin			
10.	Long	Kaifa	Tongdao Dong Autonomous County Liangjiangkou Hydropower Station/ Liangjiangkou Manager	05/07/2023	- General aspects of the project - Changes since validation / previous verifications - Calibration procedures - Power generation situation - Quality management system - Involved personnel and responsibilities - Training and practice of the operational personnel - Implementation of the monitoring plan
11.	Wu	Yourong	Tongdao Dong Autonomous County Liangjiangkou	05/07/2023	

No.	Interviewee			Date	Subject
	Last name	First name	Affiliation		
			Hydropower Station/ General Manager		- Monitoring data management - Data uncertainty and residual risks - Procedural aspects of the verification - Maintenance - Environmental aspects - Job opportunities - Salary level - Water quality and quantity - Solid waste - Biodiversity - Livelihood of the poor - Access to energy service
12.	Wu	Yongxi–Female	Tongdao Dong Autonomous County Liangjiangkou Hydropower Station/ Plant Chief	05/07/2023	
13.	Yang	Donghong	Tongdao Dong Autonomous County Liangjiangkou Hydropower Station/ Plant Operation staff	05/07/2023	
14.	Wu	Hailian–Female		05/07/2023	
15.	Wu	Xu	Jingzhou Miao & Dong Autonomous County Environment Protection Bureau/Bureau Chief	05/07/2023	- Water quality and quantity - Solid waste - Biodiversity - Livelihood of the poor - Management Regulation of Environment and Health
16.	Ou	Liuqiao	Local resident	05/07/2023	- Water quality and quantity - Solid waste - Biodiversity - Livelihood of the poor
17.	Shi	Qingchun			
18.	Ou	Liuxi–Female			
19.	Peng	Yumei	Climate Bridge Ltd./Project Manager	04/07/2023-05/07/2023	- Monitoring plan - Monitoring training - MR editorial error - Emission reduction calculation
20.	Ding	Wenjun			

2.3. Resolution of Clarification, Corrective and Forward Action Requests

The objective of this phase of the verification is to resolve identified issues that require further elaboration, research or expansion prior to CCCI's positive conclusion on the project implementation, monitoring practices and achieved emission reductions.

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

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

(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 which will impair the estimate of emission reductions;

(d) Issues identified in a FAR during validation or previous verification to be verified during verification have not been resolved by the project participants.

A Clarification Request (CL) is raised, if information is insufficient or not clear enough to determine whether the applicable requirements have been met.

A Forward Action Request (FAR) may also be raised during verification for actions if the monitoring and reporting require attention and/or adjustment for the next verification period.

2.4. Internal Technical Review

The verification report underwent an Internal Technical Review (ITR) before requesting issuance of GS VERs for the project activity.

The ITR is an independent process performed to examine thoroughly that the process of verification has been carried out in conformance with the requirements of the verification scheme as well as internal CCCI procedures.

The Team Leader provides a copy of the verification report to the reviewer, including any necessary verification documentation. The reviewer reviews the submitted documentation for conformance with the verification scheme. This will be a comprehensive review of all documentation generated during the verification process.

When performing an Internal Technical Review, the reviewer ensures that:

- The verification activity has been performed by the team by exercising utmost diligence and complete adherence to the CDM/GS4GG rules and requirements.
- The review encompasses all aspects related to the project which includes project implementation, monitoring report and emission reduction calculations, internal quality assurance systems of the project participant as well as the project activity, closure of CARs and CLs during the verification exercise, review of sample documents.

The reviewer may raise Clarification Requests to the verification team and will discuss these matters with the Team Leader.

After the agreement of the responses to the Clarification Requests from the verification team as well as the PP(s), the finalized verification report is accepted for further processing.

3. VERIFICATION CONCLUSIONS

In the following sections, the conclusions of the verification are stated.

The findings from the desk review of the original monitoring report and the findings from interviews during the online interview are described in this section of the report.

3.1. Compliance of the project general description with the registered project design document

Means of verification	A draft MR (Version 01, dated 06/06/2023) /2/ was submitted to the verification team prior to the start of the site visit. It is checked that the appropriate form has been used for compiling the MR as per the Gold Standard for Global Goals Monitoring Report Template version 1.1 in October 2020 /32/. Further every section has been checked against the Monitoring Report Template /32/ and GS4GG Principles& Requirements /33/. Via on-site visit, CCCI confirmed that the project is a grid connected hydro power project with a total installed capacity of 5.89MW (4MW+1.89MW). The bundled project includes 2 small-scale hydro power generation projects as follows: The Guanbaodu project is located on Qushui River. The installed capacity is 4 MW (1MW×4), and the annual net electricity generation is estimated to be 15,513 MWh. The surface area of the full reservoir is 327,000 m^2, thus the power density of Guanbaodu is 12.23 W/m^2. The operation of Guanbaodu project displaces equivalent power generated from CCPG which is mainly dominated by fossil fuel fired power plants. It helps to reduce greenhouse gas (GHG) emissions by an estimated annual average of 9,281 tCO_2e per year during the second crediting period. The main construction of Guanbaodu project consists of a dam, a power house and a switch station. The generated electricity is delivered to the Gantang Substation via a 35kv power transmission line, then delivered to Jingzhou Power Grid, and finally connected to CCPG. The Liangjiangkou project is located on Tongdao River. The installed capacity is 1.89 MW (0.63MW×3), and the annual net electricity generation is estimated to be 6,099 MWh. The surface area of the full reservoir is 177,500 m^2, thus the power density of Liangjiangkou is 10.65 W/m^2. The operation of Liangjiangkou project displaces equivalent power generated from CCPG which is mainly dominated by fossil fuel fired power plants. It helps to reduce greenhouse gas (GHG) emissions by an estimated annual average of 3,649 tCO_2e per year during the second crediting period. The main construction of Liangjiangkou project consists of a dam, a power house, a booster substation and a tail water channel. The generated electricity is delivered to the Xianxi Substation via a 35kv power transmission line, and finally connected to CCPG. The project reduces fossil fuel consumptions through using clean hydro

	energy. The technology to be employed is environmentally safe and sound as well as state of the art. By implementing the project PP has provided job opportunities to local community and improving the regional energy structure. The technology is confirmed by site inspection and checking the PDR /9/, Equipment technical specification as shown in the nameplate of the hydro turbines and generators /12/, Power purchase agreement /13/ and confirmed as consistent with the descriptions in the PDD /1/. Via checking the business license /8/ of Project owners, PDR /9/, Power purchase agreement /13/, CCCI verified that project owner invested in purchasing the hydro power system. By implementing the project, it has provided an opportunity for local community to generate steady and continual income for their livelihood. The project is applicable to the applied CDM approved Methodology ACM0002 “Grid-connected electricity generation from renewable sources” (Version 16.0) /30/. The project location has been clearly provided in section A.2 of the MR, which has been verified by site inspection with GPS device and the detailed coordinates of project site have been provided respectively which have also been verified by site inspection with GPS device and the information is correct. The project was registered as a GS-VER project on 31/12/2010 with the registration number of GS835. According to the validation report /4/ and previous verification reports /5/, the project participant has adopted for the renewable crediting period of 21 years with the start date of 01/01/2009, and the second crediting period is from 01/01/2016 to 31/12/2022, this monitoring period from 01/01/2022 to 31/12/2022 belongs to the second crediting period. As part of the site visit, CCCI was able to confirm that the project description in MR is in accordance with the project description contained in the PDD /1/.
Auditing techniques used in audit of the project	Site Visit, Conducting site interviews of project developer representative, Documents shared by PD during site visit and review: - documentation/documentary evidence(s), database(s) and survey results as below, MR/2/, PDD/1/, PDR /9/, Equipment technical specification as shown in the nameplate of the hydro turbines and generators /12/, Power purchase agreement /13/, Business license /8/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Any design change(s)/temporary deviation(s) since the previous physical site visit
Mitigation measures	Site visit, Conducting site interviews of project developer representative, Review supporting documents for cross-check

implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	
Findings	N/A
Conclusion	The verification team confirms that: ✓ The final version Monitoring report /2/ is complete and transparent and in accordance with the PDD /1/ and Global Goals Monitoring Report Template version 1.1 in October 2020 /32/.

3.2. Assessment of remaining issues from the previous validation/verification period

The Verification Team checked the previous validation/verification reports /4/,/5/, there are two FARs were identified. Refer to section 7 of this report for detail assessment to the FARs issued previously.

3.3. Compliance of the project implementation with the registered project design document

Means of verification	During site visit, the verification team has performed document review and site visit audit to verify if: a) All physical features (technology, project equipment, and monitoring and metering equipment) of the registered GS4GG project activity are in place. b) The PP has operated the project as per the registered PDD. c) Information (data and variables) provided in the monitoring report that is different from that stated in the registered PDD, and has caused an increase in estimates of the emission reductions in the current monitoring period or is highly likely to increase the estimates of emission reductions in the future monitoring periods. By document review and stakeholder interview, the verification team: • Checked the operation log of the project /14/, Equipment technical specification as shown in the nameplate of the hydro turbines and generators /12/, Power purchase agreement /13/; • Inspected the installed equipment including the monitoring instruments /29/, their specifications, and cross-checked them against the PDD /1/, monitoring plan /1/, and the monitoring report /2/; • Interviewed the representatives from project owner, end users and residents located nearby. • Interviewed the staff responsible for the monitoring and implementation of the project; • Reviewed the project webpage on the GS4GG website;

And below assessments are concluded,

The The Guanbaodu project has started construction in August 2005 and Liangjiangkou project has started construction in August 2006. The Guanbaodu and Liangjiangkou project both have started fully operation in January 2008 which has been confirmed by checking the Validation Report /4/ and the operational log /14/ against the and previous verification reports /5/.

PD has provided detailed project technology and implementation in the MR section B.1. CCCI herewith confirms that the specifications of main equipment are the same as provided in the MR /1/ and checking the Equipment technical specification as shown in the nameplate of the hydro turbines and generators /12/.

Basic technical details of the project are summarized in below table.

Guanbaodu Project

Parameter	Unit	Value
Hydro Turbine		
Quantity	-	4
Model	-	GD008-WZ-275
Installed capacity	MW	1.097
Water head	m	3.4
Flow rate	m^3/s	37.8
Rotation Speed	r/min	133.3
Generator		
Quantity	-	4
Model	-	SFW1000-10/1430
Rated capacity	MW	1
Rated voltage	kV	6.3
Rated current	A	114
Rated rotation Speed	r/min	600
Power factor	-	0.8

Liangjiangkou Project

Parameter	Unit	Value
Hydro Turbine		
Quantity	-	3
Model	-	Z003-LH-160
Installed capacity	MW	0.7
Water head	m	6.8
Flow rate	m^3/s	12.3
Rotation Speed	r/min	250
Generator		
Quantity	-	3
Model	-	SF630-24/1730
Rated capacity	MW	0.63
Rated voltage	kV	0.4
Rated current	A	113
Rated rotation Speed	r/min	250
Power factor	-	0.8

	Via site visit and comparing with the information in previous verification reports /5/, CCCI herewith confirms that the project implementation is consistent since the last periodical verification as mentioned in the PDD. There are no major obstructions or gaps noted during this monitoring period. The actual operations are found in accordance with the descriptions provided in the PDD. There is no deviation / change evidenced during this monitoring period and there were no delays compared to information in approved project.
Auditing techniques used in audit of the project	Site Visit, Conducting site interviews of project developer representative, Documents shared by PD during site visit and review: - documentation/documentary evidence(s), database(s) and survey results as below, MR/2/, PDD/1/, operation log of the project /14/, Equipment technical specification as shown in the nameplate of the hydro turbines and generators /12/, Power purchase agreement /13/, VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Any design change(s)/temporary deviation(s) since the previous physical site visit
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Site visit, Conducting site interviews of project developer representative, Review supporting documents for cross-check
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ all physical features of the project activity have been fully implemented in accordance with the registered PDD /1/ and the monitoring equipment was installed as described in the registered PDD /1/; ✓ The actual operation of the GS4GG project activity is implemented as per the registered PDD /1/ by the PP; ✓ Information (data and variables) provided in the monitoring report is in accordance with that stated in the registered PDD /1/.

3.4. Post-registration changes

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

No temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline were identified during the verification.

Corrections

No corrections to project information or parameters fixed at validation, as described in the registered PDD have been made.

Changes to the start date of the crediting period

There is no change to the start date of the second crediting period.

Inclusion of a monitoring plan to a registered project activity

Not Applicable.

The registered PDD contains a monitoring plan.

Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline

There is a permanent change from the registered monitoring plan, while no monitoring methodology or standardized baseline were identified during this verification.

Via checking the registered PDD, the verification team is able to confirm that Electricity monitored by metering data should be crossed checked by electricity sales receipt. However, it is not specified that the value of Min (Reading records, ETN) for export and Max (Reading records, ETN) for import should be taken.

For conservative principle, when ER is calculated, the MR/ER sheet specifies this as the Min (Reading records, ETN) for export and Max (Reading records, ETN).

So PD has submitted a request for approval of Design Change for the permanent change of monitoring plan in this monitoring period by an issuance track. During the monitoring period, the Min (Reading records, ETN) for EG_{export} and Max (Reading records, ETN) for EG_{import} are used when calculating the emission reductions.

PD has submitted a changed PDD with related monitoring plan changed with the cross-check method and VVB has assessed the change will not influence the calculation of emission reduction in monitoring plan. It is just a description supplemented to the monitoring plan. This is a conservative way to calculate emission reductions for the project and is in line with the requirements of the applied methodology, feasible and implementable within the project design - data management and quality assurance and quality control procedures.

Furthermore, by considering this change, it is confirmed that this design change will not impact the below aspects which are requested in the GS4GG Design-change-requirements version 1.1.

Aspects	**Impacts**
Additionality of the project activity	Not relevant, so no impact
Applicability of the methodology and other methodological regulatory documents with which the project activity has been certified	The change is just a description supplemented to the monitoring plan. This is a conservative way to calculate emission reductions for the project and is in line with the requirements of the applied methodology

Compliance with the monitoring plan and the applied methodology	The change is just a description supplemented to the monitoring plan. This is a conservative way to calculate emission reductions for the project and is in line with the requirements of the applied methodology
Level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the design certified monitoring plan	More accurate for monitoring results and conservative for ER calculation.
Scale of the project activity	Not relevant, so no impact
Stakeholder consultation	Not relevant, so no impact
Sustainable development criteria	Not relevant, so no impact
Safeguarding assessment	Not relevant, so no impact
Legislation	Not relevant, so no impact

Changes to the project design of a registered project activity

The following change to project design has been approved by GS prior to this verification.

The project used to consist of three hydropower projects, the Guanbaodu hydropower project (referred as 'Guanbaodu'), the Liangjiangkou hydropower project (referred as 'Liangjiangkou') and the Xinglong hydropower project (referred as 'Xinglong'). The total installed capacity of the bundle project was 7.65 MW with annual expected net electricity generation (electricity supplied to power grid) of 27,745MWh. Upon a design change request on 08/08/2014, the project participants changed the design of the project by removing one of the hydropower projects (Xinglong) from the bundled project. The other two projects were still bundled and nothing else changed. As a result, the changed project only consists of two hydropower projects (Guanbaodu and Liangjiangkou), and the installed capacity is 5.89 MW with annual expected net electricity generation of 21,612 MWh. Also, the project title has also been changed from 'Guanbaodu-Liangjiangkou-Xinglong Small-scale Hydropower Bundle Project' to 'Guanbaodu-Liangjiangkou Small-scale Hydropower Bundle Project'.

This change to project design has been approved by GS on 03/09/2014 by checking the previous verification reports /5/. And during this verification of the current monitoring period, no change to project design has been identified.

Types of changes specific to afforestation and reforestation project activities

Not Applicable.

3.5. Compliance of monitoring system applied by the project with the registered monitoring plan

Means of verification	By means of comparison of the MR with the applied CDM methodology and all applicable GS4GG guidelines, the verification team has checked whether the monitoring system is in compliance with the monitoring plan /1/ and related requirements of the applied methodology/30/ whether the sample plan conducted accordingly, the source and the applied value of the SDG monitored parameter is acceptable; whether the parameters monitored explain the operational and management structure,

	responsibilities and institutional arrangement for data collection/archiving, QA/QC procedures. The monitoring system applied by the project compliance with the registered monitoring plan is demonstrated as below: **Monitoring framework** The MR contains a diagram illustrating the Organization Structure of the Monitoring Team to be implemented by the project owner in order to implement the project activity which is confirmed consistent with the PDD. The GS monitoring team are responsible for the monitoring of all the parameters monitored for this monitoring period. And all the data was reviewed by the project developer. The organizational structure is considered sufficient to fulfil the monitoring requirements of the methodology and ensure that emission reductions verified for this monitoring period. **Monitoring equipment, data and procedures:** The monitoring procedures applied by the project compliance with the registered monitoring plan/1/ is demonstrated as below: ***Guanbaodu*** For monitoring parameters related to SDG 13, net electricity supplied to the grid by the project ($EG_{PJ,y}$) is monitored, the generated electricity is boosted from 6.3 kV to 35kV and delivered to the Gantang Transformer Station then delivered to Jingzhou Power Grid, and finally connected to CCPG. Power purchase agreement /13/ describes the grid connection manner, which is consistent with the description in both the MR and the registered PDD; Two electric meters (Gateway meter M2 installed at the Gantang Transformer Station and backup meter M1 installed at the power station of the project respectively, the two meters are bi-directional with accuracy 0.5s for M2 and 0.5 for M1) for monitoring the Electricity exported to the grid by the project (EG_{export}) and Electricity imported from the grid (EG_{import}) have been installed well. Net electricity supplied to the grid by the project ($EG_{PJ,y}$) is calculated based on the Electricity exported to the grid by the project (EG_{export}) minus Electricity imported from the grid (EG_{import}). A Power purchase agreement /13/ between the project owner and the grid company which has been checked to verify the above descriptions. For monitoring parameters related to SDG 5,7,8, the monitoring officer carries out technical training meetings and the stakeholders' questionnaires annually, and the accountant provides Electricity Sales and Purchase Invoices /16/, Electricity Transaction Notes /17/ and monthly payroll /20/ which contain the information about employees' name, gender and salary every year. During this monitoring period, the technical trainings were provided and recorded on 21/03/2022, 31/08/2022, 28/10/2022 and 01/12/2022 separately verified by checking the training records /22/, the stakeholder questionnaires contained water quality, solid wastes and biodiversity were distributed and collected on 15/06/2022 verified by checking the filled questionnaires by local stakeholders /23/.

Liangjiangkou

For monitoring parameters related to SDG 13, net electricity supplied to the grid by the project ($EG_{PJ,y}$) is monitored, the generated electricity is boosted from 6.3 kV to 35kV and delivered to the Shuangjiang Transformer Station then delivered to Hunan Power Grid, and finally connected to CCPG.

Power purchase agreement /13/ describes the grid connection manner, which is consistent with the description in both the MR and the registered PDD; One electric meter (Gateway meter M1 installed at the Shuangjiang Transformer Station, the meter is bi-directional with accuracy 0.5s) for monitoring the Electricity exported to the grid by the project (EG_{export}) and Electricity imported from the grid (EG_{import}) have been installed well.

Net electricity supplied to the grid by the project ($EG_{PJ,y}$) is calculated based on the Electricity exported to the grid by the project (EG_{export}) minus Electricity imported from the grid (EG_{import}).

A Power purchase agreement /13/ between the project owner and the grid company which has been checked to verify the above descriptions.

For monitoring parameters related to SDG 5,7,8, the monitoring officer carries out technical training meetings and the stakeholders' questionnaires annually, and the accountant provides Electricity Sales and Purchase Invoices /16/, Electricity Transaction Notes /17/ and monthly payroll /20/ which contain the information about employees' name, gender and salary every year. During this monitoring period, the technical trainings were provided and recorded on 15/04/2022 verified by checking the training records /22/, the stakeholder questionnaires contained water quality, solid wastes and biodiversity were distributed and collected on 15/04/2022 verified by checking the filled questionnaires by local stakeholders /23/.

Quality Assurance and Quality Control

The related QA/QC procedure has been conducted by PD for the monitoring process including data verification and cross check by monitoring team and project owner which has been verified by checking the monthly meter reading records /15/, Electricity Sales and Purchase Invoices /16/, Electricity Transaction Notes /17/ and calibration certificates /6/, Monthly payroll /20/, Salary Receipts /21/, filled questionnaires by local stakeholders /23/ and training records /22/.

Via checking the calibration certificates /6/, CCCI confirmed that the calibration of all the electricity meters have been carried out by the third party which is confirmed following the national standard DL/T448-2016 /24/.

It is confirmed that the QA/QC procedure has been implemented by PD properly during this monitoring period and the data management is confirmed as effective.

Emergency Procedure

For Guanbaodu: The readings of the backup meter M1 will be used for ER calculation with deduction of the transmission loss if the gateway

	meter M2 works abnormally, and if both were malfunction, and net electricity supplied to grid will be confirmed based on the conventional process accepted by project owner and Grid Company during the meter troubleshooting period. **For Liangjiangkou:** The net electricity supplied to grid will be confirmed based on the conventional process accepted by project owner and Grid Company during the meter troubleshooting period if the gateway meter M1 works abnormally. Via checking all the monthly meter reading records /15/, Electricity Sales and Purchase Invoices /16/, Electricity Transaction Notes /17/ and calibration certificates /6/, CCCI confirmed that no emergency happened during this monitoring period. **Non-Double counting assessment** The verification team has checked for double counting by reviewing all relevant registries that could hold emission reductions from the project activity, such as CDM (http://cdm.unfccc.int), VCS (http://www.v-c-s.org/), CCER (http://cdm.ccchina.org.cn/ccer.aspx), IREC (https://www.irecstandard.org/#/), ICAP (https://icapcarbonaction.com/zh/), and confirmed the project has not been registered as CDM, CCER, VCS project or under other voluntary carbon crediting scheme which is confirmed by checking the PDD /1/ and validation report /4/. Besides, due to both the hydropower plants involved in this project has unique identified GPS coordinates, hence, it can't be counted in any other voluntary market or emission reduction mechanism. The verification team is able to confirm that there is no potential exists for Double Counting of emissions reductions due to issuance of Gold Standard VERs/CO_2-certificates from the considered project activity for this monitoring period. Furthermore, based on validation team's local expertise, China has a cap & trade scheme only cover the high-emission industries, such as power generation sector that emitted at least 26,000 tons of CO_2e/year which has been verified in the public website /26/, and it is confirmed that the project activity is not included the mandatory emission control scheme and there is no emission cap enforced for the project owner by checking the enforced company list in public information /27/. In addition, PD has provided the demonstration of that GS VERs (vintage 2021 or later) of this project is not included within and counted under a regulated domestic climate mitigation target or NDC. Via checking the Chinese NDC strategy/40/, the verification team is able to confirm the project which operated in 2009 is not included then it means that there is no double counting between the GS VERs (vintage 2021 or later) of this project and the NDC in China. Finally, via checking the Declaration of No Double Counting and not involved in other carbon scheme Statement /28/, the verification team is able to confirm that the emission reductions pf the project was not double counted for this monitoring period. In conclusion, the MP is completely in accordance with the approved methodology applied by the GS project and PDD.
Auditing techniques used	Site Visit, Conducting site interviews of project developer representative,

in audit of the project	Documents shared by PD during site visit and review: - documentation/documentary evidence(s), database(s) and survey results as below, MR/2/, PDD/1/, Power Purchase Agreement/13/, monthly meter reading records /15/, Electricity Sales and Purchase Invoices /16/, Electricity Transaction Notes /17/, monthly payroll /20/, Salary Receipts /21/, training records /22/, filled questionnaires by local stakeholders /23/, calibration certificates /6/, DL/T448-2016 /24/, Declaration of No Double Counting and not involved in other carbon scheme Statement /28/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements and monitoring plan
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Site visit, Conducting site interviews of project developer representative, Review supporting documents for cross-check
Findings	CL 01 CAR 01
Conclusion	The verification team confirms that: ✓ the monitoring system including data and parameters which are required to be monitored, monitoring and reporting procedures, measuring instruments, QA/QC procedures, all complies with the applied monitoring methodology and monitoring plan in the registered PDD /1/.

3.6. Compliance of monitoring activities with the registered monitoring plan

Overview of monitoring system

By site inspection and reviewing the electricity line diagram during site visit, the verification team confirmed the monitoring system as bellow, which is in compliance with the registered PDD /1/:

The monitoring system including main instruments of electricity meters are established to monitor EG_{Export} and EG_{import} as below figure of monitoring system diagram,

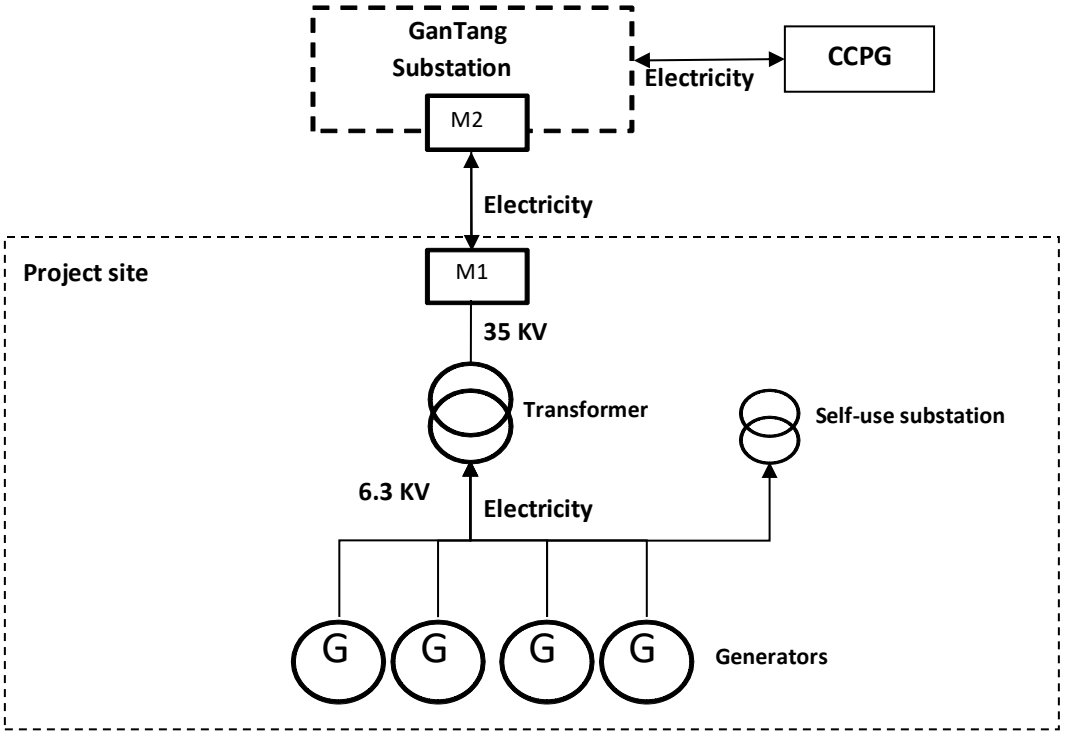


Figure 1 Electricity connection diagram of Guanbaodu

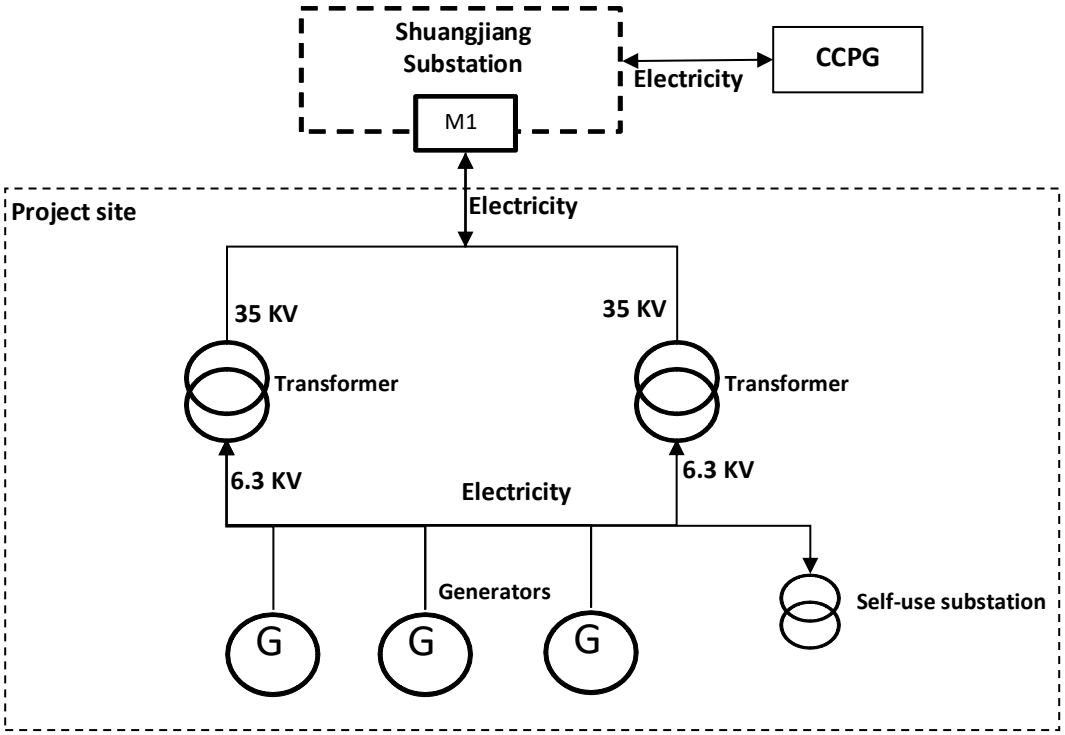


Figure 2 Electricity connection diagram of Liangjiangkou

Data and parameters fixed ex ante or at renewal of crediting period

Data/parameter	$EF_{grid,OM,y}$– SDG 13 Operating margin emission factor for Central China Power Grid
Value	0.9724 tCO_2e/MWh
Source	Transition-Annex for this project /25/
Means of verification	Confirmed as in line with the Transition-Annex for this project /25/ for ex ante determination as per the "Tool to calculate the emission factor for an electricity system" (Version 05.0) /31/
Auditing techniques used in audit of the project	Documents review: MR/2/, Transition-Annex for this project /25/, validation report/4/ previous verification reports/5/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that the data and parameters fixed ex ante for the second crediting period have been sufficiently and correctly listed.

Data/parameter	$EF_{grid,BM,y}$– SDG 13 **Build margin emission factor for Central China Power Grid**
Value	0.4737 tCO_2e/MWh
Source	Transition-Annex for this project /25/
Means of verification	Confirmed as in line with the Transition-Annex for this project /25/ for ex ante determination as per the "Tool to calculate the emission factor for an electricity system" (Version 05.0) /31/
Auditing techniques used in audit of the project	Documents review: MR/2/, Transition-Annex for this project /25/, validation report/4/ previous verification reports/5/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.

Conclusion	The verification team confirms that the data and parameters fixed ex ante for the second crediting period have been sufficiently and correctly listed.

Data/parameter	ω_{OM}– SDG 13 Weighting of operating margin emissions factor
Value	0.25
Source	Transition-Annex for this project /25/
Means of verification	Confirmed as in line with the Transition-Annex for this project /25/ for ex ante determination as per the "Tool to calculate the emission factor for an electricity system" (Version 05.0) /31/
Auditing techniques used in audit of the project	Documents review: MR/2/, Transition-Annex for this project /25/, validation report/4/ previous verification reports/5/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that the data and parameters fixed ex ante for the second crediting period have been sufficiently and correctly listed.

Data/parameter	ω_{BM}– SDG 13 Weighting of operating margin emissions factor (per cent)
Value	0.75
Source	Transition-Annex for this project /25/
Means of verification	Confirmed as in line with the Transition-Annex for this project /25/ for ex ante determination as per the "Tool to calculate the emission factor for an electricity system" (Version 05.0) /31/
Auditing techniques used in audit of the project	Documents review: MR/2/, Transition-Annex for this project /25/, validation report/4/ previous verification reports/5/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce	Document review of all the supporting evidence and comparing with the applied methodology, PDD

risks pertaining to selected auditing technique(s)	
Findings	No findings raised in this section.
Conclusion	The verification team confirms that the data and parameters fixed ex ante for the second crediting period have been sufficiently and correctly listed.

Data/parameter	***EF*$_{grid,CM,y}$**– SDG 13 **Baseline emission factor for Central China Power Grid**
Value	0.5983 tCO_2e/MWh
Source	Transition-Annex for this project /25/
Means of verification	Confirmed as in line with the Transition-Annex for this project /25/ for ex ante determination as per the "Tool to calculate the emission factor for an electricity system" (Version 05.0) /31/
Auditing techniques used in audit of the project	Documents review: MR/2/, Transition-Annex for this project /25/, validation report/4/ previous verification reports/5/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that the data and parameters fixed ex ante for the second crediting period have been sufficiently and correctly listed.

Data and parameters monitored

Relevant SDG Indicator/Safeguarding Principle	SDG 13 Indicator
Data/parameter	EG_{export}
Unit	MWh
Description	Electricity delivered to the power grid generated by the project
Source of data	Guanbaodu: Measured by gateway meter M2 and backup meter M1 Liangjiangkou: Measured by gateway meter M1
Measuring /Reading /Recording frequency	Continuous measurement and monthly recording
Monitoring equipment with calibration information	Guanbaodu: Gateway meter M2 and backup meter M1

No.	**M2 (gateway)**	**M1 (backup)**

Meter type	DTZ178	DSSD25
Accuracy class	0.5s	0.5s
Serial number	00000029161337	0704575
Calibration dates	09/06/2021 16/03/2022	06/03/2021 21/12/2021 15/12/2022
Validity	08/06/2022 15/03/2023	05/03/2022 20/12/2022 14/12/2023

Liangjiangkou:
Gateway meter M1

No.	**M1 (gateway)**
Meter type	DSZ331
Accuracy class	0.5s
Serial number	1000000141017847
Calibration dates	11/01/2021 09/01/2022
Validity	10/01/2022 08/01/2023

Means of verification

Data monitoring:
The monitoring plan /1/ requires this parameter to be continuous measurement and monthly recording. The verification team checked the electricity meters during site visit, reviewed the meter readings are recorded by the monitoring staffs and grid company /15/ and monthly electricity sales invoice /16/ and Electricity Transaction Notes /17/ and confirmed that the measurements were continuous measurement and monthly recording as required by the monitoring plan /1/.

Data generation and recording:
The Gateway meter M2, backup meter M1 for Guanbaodu project installed at the Shuangjiang Transformer Station and owned by local power company with accuracy of 0.5s and recorded monthly at 24:00h 20th of each month till June 2022 and recorded monthly at 24:00h last day of each month since July 2022.
Both the meters are bi-directional meters. The gateway meter monitors the amount of electricity exported to Central China Power Grid by the project. The meter readings are recorded daily and aggregated monthly.

The Gateway meter M1 for Liangjiangkou project is installed at the Shuangjiang Transformer Station and owned by local power company with accuracy of 0.5s and recorded monthly at 24:00h 20th of each month till June 2022 and recorded monthly at 24:00h last day of each month since July 2022.
The meter is a bi-directional meter. The gateway meter monitors the amount of electricity exported to Central China Power Grid by the project. The meter readings are recorded daily and aggregated monthly.

Meanwhile, the automatic monitoring system collects the data from the meters every day and delivers them to the grid company. The meter readings are recorded by the grid company jointly with PP,

	based on that, related monthly Electricity Transaction Notes /17/ and monthly electricity sales invoice /16/ have been issued. Finally, the meter readings are recorded by the monitoring staffs and grid company /15/ were summarized to create monthly Electricity Transaction Notes /17/. Based on monthly reports, the verification team calculated the data aggregation completely independent from the calculation provided by the PP. 100% of the monthly reports have been verified. The values have been checked with monthly electricity sales invoice /16/ and verified as consistent. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents: • monthly electricity sales invoice /16/ • Meter readings are recorded by the monitoring staffs and grid company /15/ • Electricity Transaction Notes /17/ QA/QC procedures applied: QA/QC procedures was verified via interviews with key personnels and review of following documents: The meter readings are recorded by the monitoring staffs and grid company /15/ is cross-checked with the monthly electricity sales invoice /16/ and Electricity Transaction Notes /17/, and values of this parameter are verified as consistent. The calibration information of monitoring equipment has been confirmed by checking the calibration reports /6/ which has been conducted by qualified parties /7/. Via checking the calibration reports, it is confirmed that all the ultrasonic calorimeters are duly calibrated based on according to national standard DL/T448-2016 /24/ and is valid for the entire monitoring period. The validity is 1 year. QA/QC procedure for monitoring staff training and competence were established and implemented by checking the technical training records /22/. The verification team confirmed that the QA/QC procedures applied is in accordance with the monitoring plan /1/.
Auditing techniques used in audit of the project	Site visit of monitoring devices, Conducting site interview with staffs Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, Transition-Annex for this project /25/, Power Purchase Agreement/13/, monthly meter reading records /15/, Electricity Sales and Purchase Invoices /16/, Electricity Transaction Notes /17/, calibration reports /6/, certificate of qualified parties /7/, DL/T448-2016 /24/, technical training records /22/

	VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD /1/. ✓ The parameter required by the monitoring plan have been sufficiently monitored and correctly listed.

Relevant SDG Indicator/Safeguarding Principle	SDG 13 Indicator
Data/parameter	EG_{import}
Unit	MWh
Description	Electricity imported from the power grid by the project
Source of data	Guanbaodu: Measured by gateway meter M2 and backup meter M1 Liangjiangkou: Measured by gateway meter M1
Measuring /Reading /Recording frequency	Continuous measurement and monthly recording
Monitoring equipment with calibration information	Guanbaodu: Gateway meter M2 and backup meter M1

No.	**M2 (gateway)**	**M1 (backup)**
Meter type	DTZ178	DSSD25
Accuracy class	0.5s	0.5s
Serial number	00000029161337	0704575
Calibration dates	09/06/2021 16/03/2022	06/03/2021 21/12/2021 15/12/2022
Validity	08/06/2022 15/03/2023	05/03/2022 20/12/2022 14/12/2023

Liangjiangkou:
Gateway meter M1

No.	**M1 (gateway)**
Meter type	DSZ331
Accuracy class	0.5s
Serial number	1000000141017847
Calibration dates	11/01/2021 09/01/2022
Validity	10/01/2022 08/01/2023

Means of verification	Data monitoring:

	The monitoring plan /1/ requires this parameter to be continuous measurement and monthly recording. The verification team checked the electricity meters during site visit, reviewed the meter readings are recorded by the monitoring staffs and grid company /15/ and monthly electricity purchase invoice /16/ and Electricity Transaction Notes /17/ and confirmed that the measurements were continuous measurement and monthly recording as required by the monitoring plan /1/. Data generation and recording: The Gateway meter M2, backup meter M1 for Guanbaodu project installed at the Shuangjiang Transformer Station and owned by local power company with accuracy of 0.5s and recorded monthly at 24:00h 20th of each month till June 2022 and recorded monthly at 24:00h last day of each month since July 2022. Both the meters are bi-directional meters. The gateway meter monitors the amount of electricity imported from Central China Power Grid by the project. The meter readings are recorded daily and aggregated monthly. The Gateway meter M1 for Liangjiangkou project is installed at the Shuangjiang Transformer Station and owned by local power company with accuracy of 0.5s and recorded monthly at 24:00h 20th of each month till June 2022 and recorded monthly at 24:00h last day of each month since July 2022. The meter is a bi-directional meter. The gateway meter monitors the amount of electricity imported from Central China Power Grid by the project. The meter readings are recorded daily and aggregated monthly. Meanwhile, the automatic monitoring system collects the data from the meters every day and delivers them to the grid company. The meter readings are recorded by the grid company jointly with PP, based on that, related monthly Electricity Transaction Notes /17/ and monthly electricity purchase invoice /16/ have been issued. Finally, the meter readings are recorded by the monitoring staffs and grid company /15/ were summarized to create monthly Electricity Transaction Notes /17/. Based on monthly reports, the verification team calculated the data aggregation completely independent from the calculation provided by the PP. 100% of the monthly reports have been verified. The values have been checked with monthly electricity purchase invoice /16/ and verified as consistent for each month except from 21/12/2021 to 31/12/2021 of Guanbaodu Project, for this period, the electricity generated from 21/12/2021 to 31/12/2021 has been counted and calculated in the tenth monitoring period from 01/01/2021 to 31/12/2021 and has been deducted from the ETN on 20/01/2022, which has been confirmed by the local power grid company, it is confirmed that the correct and conservative value has been used for ER calculation. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents:

	• monthly electricity purchase invoice /16/ • Meter readings are recorded by the monitoring staffs and grid company /15/ • Electricity Transaction Notes /17/ QA/QC procedures applied: QA/QC procedures was verified via interviews with key personnels and review of following documents: The meter readings are recorded by the monitoring staffs and grid company /15/ is cross-checked with the monthly electricity purchase invoice /16/ and Electricity Transaction Notes /17/, and values of this parameter are verified as consistent. The calibration information of monitoring equipment has been confirmed by checking the calibration reports /6/ which has been conducted by qualified parties /7/. Via checking the calibration reports, it is confirmed that all the ultrasonic calorimeters are duly calibrated based on according to national standard DL/T448-2016 /24/ and is valid for the entire monitoring period. The validity is 1 year. QA/QC procedure for monitoring staff training and competence were established and implemented by checking the technical training records /22/. The verification team confirmed that the QA/QC procedures applied is in accordance with the monitoring plan /1/.
Auditing techniques used in audit of the project	Site visit of monitoring devices, Conducting site interview with staffs Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, Transition-Annex for this project /25/, Power Purchase Agreement/13/, monthly meter reading records /15/, Electricity Sales and Purchase Invoices /16/, Electricity Transaction Notes /17/, calibration reports /6/, certificate of qualified parties /7/, DL/T448-2016 /24/, technical training records /22/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that:

	✓ The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD /1/. ✓ The parameter required by the monitoring plan have been sufficiently monitored and correctly listed.

Relevant SDG Indicator/Safeguarding Principle	SDG 13 Indicator
Data/parameter	$EG_{PJ,y}$
Unit	MWh
Description	Net Electricity supplied to the grid by the project
Source of data	Calculated by $EG_{PJ,y} = EG_{export} - EG_{import}$
Measuring /Reading /Recording frequency	N/A
Monitoring equipment with calibration information	Refer to above two parameters' table.
Means of verification	Data monitoring: $EG_{PJ,y}$ is calculated by below formula $EG_{PJ,y} = EG_{export} - EG_{import}$ Data calculation: The calculated value of $EG_{PJ,y}$ in the MR has been re-calculated by the verification team based on the values from the monthly meter reading records /15/, Electricity Sales and Purchase Invoices /16/, and monthly Electricity Transaction Notes /17/ for all the listed parameters as assessed in above tables. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents: • monthly electricity sales and purchase invoices /16/ • monthly Electricity Transaction Notes /17/ • Meter readings are recorded by the monitoring staffs and grid company /15/ QA/QC procedures applied: QA/QC procedures was verified via interviews with key personnels and review of following documents: The meter readings are recorded by the monitoring staffs and grid company /15/ is cross-checked with the Electricity Sales and Purchase Invoices /16/, and monthly Electricity Transaction Notes /17/, and values of all related parameters are verified as correct. The calculation results of $EG_{PJ,y}$ are verified as correct. QA/QC procedure for monitoring staff training and competence were established and implemented by checking the technical training records /22/.

	The verification team confirmed that the QA/QC procedures applied is in accordance with the monitoring plan /1/.
Auditing techniques used in audit of the project	Site visit of monitoring devices, Conducting site interview with staffs Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, Transition-Annex for this project /25/, Power Purchase Agreement/13/, monthly meter reading records /15/, Electricity Sales and Purchase Invoices /16/, Electricity Transaction Notes /17/, calibration reports /6/, certificate of qualified parties /7/, DL/T448-2016 /24/, technical training records /22/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD /1/. ✓ The parameter required by the monitoring plan have been sufficiently monitored and correctly listed.

Relevant SDG Indicator/Safeguarding Principle	SDG 13 Indicator
Data/parameter	Installed capacity
Unit	MW
Description	Installed capacity of project
Source of data	Readings of nameplate of all the generators
Measuring /Reading /Recording frequency	Yearly
Monitoring equipment with calibration information	N/A
Means of verification	Data monitoring: The monitoring plan /1/ states this parameter data derived from nameplates of all the generators installed in the project/12/. Data generation and recording:

	Guanbaodu Project 4 sets of turbine generators with rated unit capacity of 1 MW are installed which is in line with registered PDD. The nameplates /12/ of turbine generators are read in year 2022. ***Liangjiangkou Project*** 3 sets of turbine generators with rated unit capacity of 0.63 MW are installed which is in line with registered PDD. The nameplates /12/ of turbine generators are read in year 2022. The value has been checked with the capacity indicated on the nameplates (4 x 1 MW+ 3 x 0.63 MW) of generators /12/ and the technical information/parameters of the key equipment as listed in the PDD /1/. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents: • Nameplates of all the generators installed in the project/12/ QA/QC procedures applied: QA/QC procedures was verified via interviews with key personnels and review of nameplates of all the generators installed in the project/12/. The verification team confirmed that the QA/QC procedures applied is in accordance with the monitoring plan /1/.
Auditing techniques used in audit of the project	Site visit of monitoring devices, Conducting site interview with staffs Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, Transition-Annex for this project /25/, nameplates of all the generators installed in the project/12/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD /1/. ✓ The parameter required by the monitoring plan have been sufficiently monitored and correctly listed.

Relevant SDG Indicator/Safeguarding Principle	SDG 13 Indicator
Data/parameter	Area of the reservoir
Unit	m^2
Description	Area of the reservoir
Source of data	Report of reservoir area of year 2022
Measuring /Reading /Recording frequency	Yearly
Monitoring equipment with calibration information	N/A
Means of verification	Data monitoring: The monitoring plan /1/ states this parameter data derived from measured result of area of the reservoir /18/. Data generation and recording: ***Guanbaodu Project*** Area of the reservoir is measured yearly by a qualified 3rd party entity "Jingzhou Miao and Dong Autonomous County Hydro Management Station" /18/. The area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full was determined as 328,000 m^2 in 2022. ***Liangjiangkou Project*** Area of the reservoir is measured yearly by a qualified 3rd party entity "Tongdao Dong Autonomous County Water Conservancy Bureau" /18/. The area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full was determined as 176,800 m^2 in 2022. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents: • Report of measured result of area of the reservoir /18/ QA/QC procedures applied: QA/QC procedures was verified via interviews with key personnels and review of report of measured result of area of the reservoir /18/. The verification team confirmed that the QA/QC procedures applied is in accordance with the monitoring plan /1/.
Auditing techniques used in audit of the project	Site visit of monitoring devices, Conducting site interview with staffs Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, Transition-Annex for this project /25/, Report of reservoir area of year 2022/18/

	VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD /1/. ✓ The parameter required by the monitoring plan have been sufficiently monitored and correctly listed.

Relevant SDG Indicator/Safeguarding Principle	SDG 13 Indicator
Data/parameter	Power density
Unit	W/m^2
Description	Power density of project
Source of data	Calculated by Power density= Installed capacity/Area of the reservoir
Measuring /Reading /Recording frequency	Yearly
Monitoring equipment with calibration information	N/A
Means of verification	Data monitoring: The PDD /1/ states this parameter is calculated as Power density= Installed capacity/Area of the reservoir Data calculation: ***Guanbaodu Project*** The area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full was determined as 328,000 m^2 in 2022 /18/, while the installed capacity is 4MW /12/, the power density is therefore calculated as 12.20 W/m^2 which is higher than 10 W/m^2. ***Liangjiangkou Project*** The area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full was determined as 176,800 m^2 in 2022 /18/, while the installed capacity is 1.89MW /12/, the power density is therefore calculated as 10.69 W/m^2 which is higher than 10 W/m^2. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents:

	• Nameplates of all the generators installed in the project/12/ • Report of measured result of area of the reservoir /18/ QA/QC procedures applied: QA/QC procedures was verified via interviews with key personnels and review of nameplates of all the generators installed in the project/12/ and report of measured result of area of the reservoir /18/. The verification team confirmed that the QA/QC procedures applied is in accordance with the monitoring plan /1/.
Auditing techniques used in audit of the project	Site visit of monitoring devices, Conducting site interview with staffs Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, Transition-Annex for this project /25/, Report of reservoir area of year 2022/18/, nameplates of all the generators installed in the project/12/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD /1/. ✓ The parameter required by the monitoring plan have been sufficiently monitored and correctly listed.

Relevant SDG Indicator/Safeguarding Principle	SDG 7 Indicator
Data/parameter	Net Electricity supplied to the grid by the project ($EG_{PJ,y}$)
Unit	MWh
Description	Net Electricity supplied to the grid by the project
Source of data	Calculated by $EG_{PJ,y} = EG_{export} - EG_{import}$
Measuring /Reading /Recording frequency	N/A
Monitoring equipment with calibration information	Refer to above two parameters' table.
Means of verification	Data monitoring: $EG_{PJ,y}$ is calculated by below formula

	$EG_{PJ,y} = EG_{export} - EG_{import}$ Data calculation: The calculated value of $EG_{PJ,y}$ in the MR has been re-calculated by the verification team based on the values from the monthly meter reading records /15/, Electricity Sales and Purchase Invoices /16/, and monthly Electricity Transaction Notes /17/ for all the listed parameters as assessed in above tables. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents: • monthly electricity sales and purchase invoices /16/ • monthly Electricity Transaction Notes /17/ • Meter readings are recorded by the monitoring staffs and grid company /15/ QA/QC procedures applied: QA/QC procedures was verified via interviews with key personnels and review of following documents: The meter readings are recorded by the monitoring staffs and grid company /15/ is cross-checked with the Electricity Sales and Purchase Invoices /16/, and monthly Electricity Transaction Notes /17/, and values of all related parameters are verified as correct. The calculation results of $EG_{PJ,y}$ are verified as correct. QA/QC procedure for monitoring staff training and competence were established and implemented by checking the technical training records /22/. The verification team confirmed that the QA/QC procedures applied is in accordance with the monitoring plan /1/.
Auditing techniques used in audit of the project	Site visit of monitoring devices, Conducting site interview with staffs Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, Transition-Annex for this project /25/, Power Purchase Agreement/13/, monthly meter reading records /15/, Electricity Sales and Purchase Invoices /16/, Electricity Transaction Notes /17/, calibration reports /6/, certificate of qualified parties /7/, DL/T448-2016 /24/, technical training records /22/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission

Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD /1/. ✓ The parameter required by the monitoring plan have been sufficiently monitored and correctly listed.

Relevant SDG Indicator/Safeguarding Principle	SDG 5 Indicator
Data/parameter	Women employees
Unit	Number
Description	The job positions for local women provided by the project
Source of data	Payroll
Measuring /Reading /Recording frequency	Monthly
Monitoring equipment with calibration information	N/A
Means of verification	Data monitoring: The monitoring plan /1/ states this parameter data derived from monthly payroll /20/. Data generation and recording: Monitoring parameter of job positions for local women was determined by checking the monthly payroll /20/ and cross-checked with Salary Receipts /21/, the verification team verified that 3 women for Guanbaodu and 2 women for Liangjiangkou were employed in the project for this monitoring period. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents: • Monthly payroll /20/ • Salary Receipts /21/ QA/QC procedures applied: The data from monthly payroll /20/ was cross-checked with Salary Receipts /21/ and confirmed the numbers are correct. The verification team confirmed that the QA/QC procedures applied is in accordance with the monitoring plan /1/.
Auditing techniques used in audit of the project	Site visit of monitoring devices, Conducting site interview with staffs Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, Transition-Annex for this project /25/, Salary Receipts /21/,

	monthly payroll /20/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD /1/. ✓ The parameter required by the monitoring plan have been sufficiently monitored and correctly listed.

Relevant SDG Indicator/Safeguarding Principle	SDG 8 Indicator
Data/parameter	Training opportunities (human and institutional capacity)
Unit	-
Description	Technical training provided by the project and the number of employees being trained technically
Source of data	Training records
Measuring /Reading /Recording frequency	Monthly
Monitoring equipment with calibration information	N/A
Means of verification	Data monitoring: The monitoring plan /1/ states this parameter data derived from Training records /22/. Data generation and recording: Monitoring parameter of Training opportunities was determined by checking the Training records /22/, the verification team verified that the trainings were provided to the employees 4 times for Guanbaodu and once for Liangjiangkou for this monitoring period and the number of employees trained technically by Guanbaodu is 12 and the number of employees trained technically by Liangjiangkou is 5. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents: • Training records /22/ QA/QC procedures applied: The data from Training records /22/ is checked and confirmed the numbers of employees trained are correct.

	The verification team confirmed that the QA/QC procedures applied is in accordance with the monitoring plan /1/.
Auditing techniques used in audit of the project	Site visit of monitoring devices, Conducting site interview with staffs Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, Transition-Annex for this project /25/, Training records /22/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	CAR 02
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD /1/. ✓ The parameter required by the monitoring plan have been sufficiently monitored and correctly listed.

Relevant SDG Indicator/Safeguarding Principle	SDG 8 Indicator
Data/parameter	Employment (including job quality, fulfillment of labor standards)
Unit	Number
Description	The numbers of employees of permanent jobs provided by the project
Source of data	Payroll
Measuring /Reading /Recording frequency	Monthly
Monitoring equipment with calibration information	N/A
Means of verification	Data monitoring: The monitoring plan /1/ states this parameter data derived from monthly payroll /20/. Data generation and recording: Monitoring parameter of job positions for local women was determined by checking the monthly payroll /20/ and cross-checked with Salary Receipts /21/, the verification team verified that 12 for Guanbaodu and 5 for Liangjiangkou are employed in the project during this monitoring period.

	The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents: • Monthly payroll /20/ • Salary Receipts /21/ QA/QC procedures applied: The data from monthly payroll /20/ was cross-checked with Salary Receipts /21/ and confirmed the numbers are correct. The verification team confirmed that the QA/QC procedures applied is in accordance with the monitoring plan /1/.
Auditing techniques used in audit of the project	Site visit of monitoring devices, Conducting site interview with staffs Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, Transition-Annex for this project /25/, Salary Receipts /21/, monthly payroll /20/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD /1/. ✓ The parameter required by the monitoring plan have been sufficiently monitored and correctly listed.

Relevant SDG Indicator/Safeguarding Principle	SDG 8 Indicator
Data/parameter	Salary level (Livelihood of the poor)
Unit	CNY/month
Description	Salary of employees of the project
Source of data	Payroll
Measuring /Reading /Recording frequency	Monthly
Monitoring equipment with calibration information	N/A
Means of verification	Data monitoring: The monitoring plan /1/ states this parameter data derived from monthly payroll /20/.

	Data generation and recording: Monitoring parameter of job positions for local women was determined by checking the monthly payroll /20/ and cross-checked with Salary Receipts /21/, the verification team verified that the income for permanent employees is in the range from 1,041 to 8,920 CNY/month with an average of 4,966 CNY/month (Guanbaodu), the income for permanent employees is in the range from 1,000 to 3,400 CNY/month with an average of 2,377 CNY/month (Liangjiangkou), The average salary level of this bundled project was calculated as 4,205 ((4,966×12+2,377×5)/17=4,205) CNY/month And via checking the rural per capita disposable income for Huaihua City in 2022 /39/, the verification team confirms that the average salary level of the bundled project is higher than rural per capita disposable income 1,628 CNY/month in Huaihua City /39/. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents: • Monthly payroll /20/ • Salary Receipts /21/ • Rural per capita disposable income for Huaihua City in 2022 /39/ QA/QC procedures applied: The data from monthly payroll /20/ was cross-checked with Salary Receipts /21/ and confirmed the figures are correct. The verification team confirmed that the QA/QC procedures applied is in accordance with the monitoring plan /1/.
Auditing techniques used in audit of the project	Site visit of monitoring devices, Conducting site interview with staffs Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, Transition-Annex for this project /25/, Salary Receipts /21/, monthly payroll /20/, rural per capita disposable income for Huaihua City in 2022 /39/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD /1/. ✓ The parameter required by the monitoring plan have been sufficiently monitored and correctly listed.

3.7. Comparison of monitored parameters with last monitoring period

Means of verification	Not applicable due to the bundled project is non-Community Service Activities.
Findings	N/A
Conclusion	N/A

3.8. Compliance of the sampling implementation with the registered sampling plan

Means of verification	N/A
Findings	N/A
Conclusion	N/A

3.9. Assessment of data and calculation of SDG outcomes

Calculation of baseline value or estimation of baseline situation of each SDG Impact

Means of verification	The verification team has verified the baseline value of each SDG outcome by: ***SDG 5 Baseline Impact:*** Via checking the PDD, it is confirmed that in the baseline situation, 0 new job created to local women without this project. Therefore, Baseline Impact is zero. ***SDG 7 Baseline Impact:*** Via checking the PDD, it is confirmed that in the baseline situation, 0 MWh of renewable energy generated without this project. Therefore, Baseline Impact is zero. ***SDG 8 Baseline Impact:*** Via checking the PDD and through interview with representative of staffs, it is confirmed that in the baseline situation, no new job created, no income and no training without this project. Therefore, Baseline Impact benefit is zero. ***SDG 13 Baseline Impact:*** Via checking the PDD, verification team confirmed that no GHG emission reduction would be achieved in baseline scenario. Therefore, Baseline impact benefit is zero.
Auditing techniques used in audit of the project	Documents shared by PD during site visit To review: - documentation/documentary evidence(s) All the supporting evidence as above for ex ante determined and monitored parameters which are used to calculate the baseline value or estimation of baseline situation of each SDG Impact

	VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission reductions), Risk of non-conformity with potential reversal of GHG benefits and other SDG Impacts
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ A complete set of data for the monitoring period is available; ✓ Information on the baseline calculation value of each SDG impact provided in the monitoring report has been cross-checked with other sources; ✓ Calculations of baseline impact of each SDG impact have been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology document; ✓ There are no assumptions in SDG impact calculations; ✓ Appropriate emission factor and other reference values have been correctly applied.

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

Means of verification	The verification team has verified the project value of each SDG outcome by: ***SDG 5 Project Impact:*** Based on the monitoring value of SDG5 Indicator 5.1.1 in section 3.6, the project impact of SDG 5 has been determined as below, From 01/01/2022 to 31/12/2022, Guanbaodu and Liangjiangou provided 3 and 2 job position for local women respectively, so the number of women employees is 5 ***SDG 7 Project Impact:*** Based on the monitoring value of SDG7 Indicator 7.2.1 in section 3.6, the project impact of SDG 7 has been determined as below, From 01/01/2022 to 31/12/2022, net generation electricity of Guanbaodu delivered to the Jingzhou County Grid was 15,491.700 MWh and net generation electricity of Liangjiakou delivered to the Tongdao County Grid was 7,016.996 MWh, so MWh of renewable energy generated is 22,508.696 MWh ***SDG 8 Project Impact:*** Based on the monitoring value of SDG indicator 8.3.1 in section 3.6, the project impact of SDG 8 has been determined as below,

From 01/01/2022 to 31/12/2022, Guanbaodu provided 13 employment positions and carried out 4 times technical training meetings; Liangjiangkou provided 5 employment positions and carried out once technical training meetings, Number of job positions and training opportunities is 17 employment positions and 5 training opportunities.

Based on the monitoring value of SDG indicator 8.5.1 in section 3.6, the project impact of SDG 8 has been determined as below,

From 01/01/2022 to 31/12/2022, the income for permanent employees is in the range from 1,041 to 8,920 CNY/month with an average of 4,966 CNY/month (Guanbaodu), the income for permanent employees is in the range from 1,000 to 3,400 CNY/month with an average of 2,377 CNY/month (Liangjiangkou), which is verified higher than rural per capita disposable income 1,628 CNY/month of Huaihua City in 2022. The average salary level of this bundled project was calculated as 4,205 ((4,966×12+2,377×5)/17=4,205) CNY/month.

SDG 13 Project Impact:

Via checking the MR /2/ and through checking the emission reduction calculation sheet /3/, the verification team confirmed that GHG Emission Reductions value of this project is calculated below,

Baseline Emissions BE_y Calculation Assessment:

The formula used for the determination of baseline emissions which is consistent with the PDD:

$$BE_y = EG_{PJ,y} \times EF_{grid,CM,y} \quad (1)$$

Where:

BE_y = Baseline emissions in year y (tCO_2e)

$EG_{PJ,y}$ = Quantity of net electricity generation that is produced and fed into the grid as a result of the implementation of the project activity in year y (MWh), $EG_{PJ,y} = EG_{export,y} - EG_{import,y}$

$EF_{grid,CM,y}$ = Combined margin CO_2 emission factor for grid connected power generation in year y calculated using the latest version of the "Tool to calculate the emission factor for an electricity system (tCO_2/MWh), the $EF_{grid,CM,y}$ = 0.5983 tCO_2e/MW

The values of all the listed parameters for both ex ante and monitored ones are assessed in above section 3.6. And the calculation process as elaborated in the ER sheet /3/ has been checked by verification team and re-produced as correct.

Hence based on the assessed values, Baseline emission calculation during this monitoring period is confirmed by the verification team to be:

Guanbaodu

Time interval	EG_{export} (MWh)	EG_{import} (MWh)	$EG_{PJ,y}$ (MWh)	$EF_{grid, CM,y}$ (tCO_2/MWh)	BE_y (tCO_2e)
01/01/2022-20/01/2022	543.900	6.720	537.180	0.5983	321
21/01/2022-20/02/2022	2,449.860	0.000	2,449.860	0.5983	1,465
21/02/2022-20/03/2022	1,899.240	10.500	1,888.740	0.5983	1,130

21/03/2022-20/04/2022	1,148.280	0.840	1,147.440	0.5983	686
21/04/2022-20/05/2022	2,377.620	0.420	2,377.200	0.5983	1,422
21/05/2022-20/06/2022	2,700.600	0.000	2,700.600	0.5983	1,615
21/06/2022-30/06/2022	1,014.300	0.000	1,014.300	0.5983	606
01/07/2022-31/07/2022	2,008.020	0.420	2,007.600	0.5983	1,201
01/08/2022-31/08/2022	616.980	2.100	614.880	0.5983	367
01/09/2022-30/09/2022	322.560	4.620	317.940	0.5983	190
01/10/2022-31/10/2022	144.060	9.660	134.400	0.5983	80
01/11/2022-30/11/2022	90.720	7.560	83.160	0.5983	49
01/12/2022-31/12/2022	225.540	7.140	218.400	0.5983	130
Total	**15,541.680**	**49.980**	**15,491.700**	**0.5983**	**9,268**

Liangjiangkou

Time interval	EG_{export} (MWh)	EG_{import} (MWh)	$EG_{PJ,y}$ (MWh)	$EF_{grid,CM,y}$ (tCO_2/MWh)	BE_y (tCO_2e)
01/01/2022-20/01/2022	322.056	1.764	320.292	0.5983	191
21/01/2022-20/02/2022	1,078.644	0.280	1,078.364	0.5983	645
21/02/2022-20/03/2022	779.576	0.084	779.492	0.5983	466
21/03/2022-20/04/2022	578.368	0.364	578.004	0.5983	345
21/04/2022-20/05/2022	1,086.876	0.056	1,086.820	0.5983	650
21/05/2022-20/06/2022	991.928	2.660	989.268	0.5983	591
21/06/2022-30/06/2022	405.636	0.196	405.440	0.5983	242
01/07/2022-31/07/2022	978.264	0.084	978.180	0.5983	585
01/08/2022-31/08/2022	342.440	1.064	341.376	0.5983	204
01/09/2022-30/09/2022	158.900	2.100	156.800	0.5983	93
01/10/2022-31/10/2022	104.412	2.464	101.948	0.5983	60
01/11/2022-30/11/2022	97.524	2.128	95.396	0.5983	57
01/12/2022-31/12/2022	107.772	2.156	105.616	0.5983	63
Total	**7,032.396**	**15.400**	**7,016.996**	**0.5983**	**4,198**

Total for this project

Time interval	BE_y - *Guanbaodu* (tCO_2e)	BE_y - *Liangjiangkou* (tCO_2e)	BE_y (tCO_2e)
01/01/2022-20/01/2022	321	191	512
21/01/2022-20/02/2022	1,465	645	2,110
21/02/2022-20/03/2022	1,130	466	1,596
21/03/2022-20/04/2022	686	345	1,031
21/04/2022-20/05/2022	1,422	650	2,072
21/05/2022-20/06/2022	1,615	591	2,206
21/06/2022-30/06/2022	606	242	848
01/07/2022-31/07/2022	1,201	585	1,786
01/08/2022-31/08/2022	367	204	571
01/09/2022-30/09/2022	190	93	283
01/10/2022-31/10/2022	80	60	140
01/11/2022-30/11/2022	49	57	106
01/12/2022-31/12/2022	130	63	193

Total	**9,268**	**4,198**	**13,466**

The baseline emissions (BE) during this monitoring period are calculated as **13,466** tCO_2e.

Project Emission Calculation Assessment:

The formula used for the determination of project emissions which is confirmed as consistent with the latest approved PDD and applied methodology:

$$PE_y = PE_{FF,y} + PE_{GP,y} + PE_{HP,y} \quad (2)$$

Where:

PE_y	=	Project emissions (tCO_2/yr)
$PE_{FF,y}$	=	Project emissions from fossil fuel consumption in year *y* (tCO_2/yr)
$PE_{GP,y}$	=	Project emissions from the operation of geothermal power plants due to the release of non-condensable gases in year *y* (tCO_2e/yr)
$PE_{HP,y}$	=	Project emissions from water reservoirs of hydro power plants in year *y* (tCO_2e/yr)

According to ACM0002, for all renewable energy power generation project activities, emissions due to the use of fossil fuels for the backup generator can be neglected, so $PE_{FF,y} = 0$.

The project is not a geothermal power plant, thus $PE_{GP,y} = 0$.

Therefore, $PE_y = PE_{HP,y}$

The proposed hydropower project is a new project and results in a new reservoir, and its power density of is calculated as follows:

$$PD = \frac{Cap_{PJ} - Cap_{BL}}{A_{PJ} - A_{BL}}$$

Where:

PD	=	Power density of the project activity (W/m^2)
Cap_{PJ}	=	Installed capacity of the hydro power plant after the implementation of the project activity (W)
Cap_{BL}	=	Installed capacity of the hydro power plant before the implementation of the project activity (W). For new hydro power plants, this value is zero
A_{PJ}	=	Area of the reservoir measured in the surface of the water, after the implementation of the project activity, when the reservoir is full (m^2)
A_{BL}	=	Area of the reservoir measured in the surface of the water, before the implementation of the project activity, when the reservoir is full (m^2). For new reservoirs, this value is zero

The values of all the listed parameters for both ex ante and monitored ones are assessed in above section 3.6. And the calculation process as elaborated in the ER sheet /3/ has been checked by verification team and re-produced as correct.

During this monitoring period, for the bundled two projects,

Guanbaoodu:

	Cap_{BL} = 0, A_{BL} = 0, Cap_{PJ} = 4MW, and A_{PJ} = 328,000 m^2, therefore *PD*=12.20 W/m^2, which is greater than 10W/m^2; **Liangjiangkou:** Cap_{BL} = 0, A_{BL} = 0, Cap_{PJ} = 1.89MW, and A_{PJ} = 176,800 m^2, therefore *PD*=10.69 W/m^2, which is greater than 10W/m^2. Therefore, according to ACM0002, $PE_{HP,y}$ = 0, so PE_y = $PE_{HP,y}$ = 0. ***Leakage Calculation Assessment:*** According to ACM0002, there is no leakage considered. ***Emission reductions Calculation Assessment:*** The emission reductions (ER_y) of SDG 13 by the project during a given year y are the difference among baseline emissions (BE_y), project emissions (PE_y). Hence, $ER_y = BE_y - PE_y = BE_y$ =13,466 tCO_2e So the SDG 13 Project Impact, i.e. emission reductions (ER_y) during this monitoring period is **13,466** tCO_2e. The emission reduction calculation are provided in the Emission reduction calculation spreadsheet /2/ in a transparent manner and the calculation found correct. There is no material error noted in the accounting and application of various data against monitored parameters.
Auditing techniques used in audit of the project	Documents shared by PD during site visit To review: - documentation/documentary evidence(s) All the supporting evidence as above for ex ante determined and monitored parameters which are used to calculate the baseline value or estimation of baseline situation of each SDG Impact VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission reductions), Risk of non-conformity with potential reversal of GHG benefits and other SDG Impacts
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	CAR 03
Conclusion	The verification team confirms that: ✓ A complete set of data for the monitoring period is available; ✓ Information on the project calculation value of each SDG impact provided in the monitoring report has been cross-checked with other sources;

	✓ Calculations of project impact of each SDG impact have been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology document; ✓ There are no assumptions in SDG impact calculations; ✓ Appropriate emission factor and other reference values have been correctly applied.

Calculation of leakage

Means of verification	The verification team has reviewed the leakage calculation as per the registered PDD /1/ and the applied methodology /30/. No leakage needs to be considered according to ACM0002 Version 16.0.
Auditing techniques used in audit of the project	Documents review: MR/2/, PDD and validation report/4/,/3/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission reductions)
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of PDD and applied methodology
Findings	No findings raised in this section.
Conclusion	The verification team confirms that no leakage needs to be considered, which is consistent with methodology ACM0002 Version 16.0 and PDD /1/.

Calculation of net benefits or direct calculation for each SDG Impact

Means of verification

The verification team has reviewed the calculation of net impact of each SDG in the MR /2/ and emission reduction calculation spreadsheet /3/.

Net impacts of all the SDGs have been summarized in below table

SDG	SDG Impact	Baseline estimate	Project estimate	Net benefit
5	Number of women employees (The bundled project)	0	5	5
5	Number of women employees (Guanbaodu)	0	3	3
5	Number of women employees (Liangjiangkou)	0	2	2

	7	MWh of renewable energy generated (The bundled project)	0	22,508.696 MWh	22,508.696 MWh
	7	MWh of renewable energy generated (Guanbaodu)	0	15,491.700 MWh	15,491.700 MWh
	7	MWh of renewable energy generated (Liangjiangkou)	0	7,016.996 MWh	7,016.996 MWh
	8	Number of job positions and training opportunities (The bundled project)	0	17 (5 training)	17 (5 training)
	8	Number of job positions and training opportunities (Guanbaodu)	0	12 (4 training)	12 (4 training)
	8	Number of job positions and training opportunities (Liangjiangkou)	0	5 (1 training)	5 (1 training)
	8	Salary level (The bundled project)	0	4,205 CNY/month	4,205 CNY/month
	8	Salary level (Guanbaodu)	0	4,966 CNY/month	4,966 CNY/month
	8	Salary level (Liangjiangkou)	0	2,377 CNY/month	2,377 CNY/month
	13	Emissions Reductions (The bundled project)	0	13,466 tCO_2e	13,466 tCO_2e
	13	Emissions Reductions (Guanbaodu)	0	9,268 tCO_2e	9,268 tCO_2e
	13	Emissions Reductions (Liangjiangkou)	0	4,198 tCO_2e	4,198 tCO_2e

Auditing techniques used in audit of the project	Documents shared by PD during site visit To review: - documentation/documentary evidence(s) All the supporting evidence as above for ex ante determined and monitored parameters which are used to calculate the baseline value or estimation of baseline situation of each SDG Impact VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission reductions), Risk of non-conformity with potential reversal of GHG benefits and other SDG Impacts
Mitigation measures implemented to eliminate or reduce risks pertaining to	Document review of all the supporting evidence and comparing with the applied methodology, PDD

selected auditing technique(s)	
Findings	No findings raised in this section
Conclusion	The verification team confirms that: ✓ A complete set of data for the monitoring period is available; ✓ Information on the net benefits for each SDG Impact provided in the monitoring report has been cross-checked with other sources; ✓ Calculations of net benefits for each SDG Impact have been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology document; ✓ There are no assumptions in net benefits for each SDG Impact; ✓ Appropriate emission factor and other reference values have been correctly applied.

Comparison of actual SDG Impacts with estimates in approved PDD

Means of verification	The comparison of actual SDG Impacts with estimates in registered PDD /1/ has been checked and re-calculated by the verification team as listed in below table,

SDG	Values in PDD	Actual Values achieved in MP
5	4 number of women employees	5 number of women employees
7	21,612MWh of renewable energy generated	22,508.696 MWh of renewable energy generated
8	23 number of job positions and training opportunities	17 number of job positions and 5 number of training opportunities
	Salary level of 1,100~3,773 CNY/month	Salary level of 4,205 CNY/month
13	12,930 tCO_2e GHGs emission avoided or sequestered	13,466 tCO_2e GHGs emission avoided or sequestered

Auditing techniques used in audit of the project	Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, validation report/4/, All the supporting evidence as above for ex ante determined and monitored parameters which are used to calculate the actual SDG Impacts VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission reductions), Risk of non-conformity with potential reversal of GHG benefits and other SDG Impacts
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD

Findings	No findings raised in this section.
Conclusion	The MR includes a summary table of comparison of actual values of the monitoring period with the estimations in the approved PDD for each SDG impact.

Remarks on difference from estimated value in registered PDD

Means of verification	For SDG 5 The actual net impact during this monitoring period is higher than the estimated value due to the more job has been provided to women comparing with the average estimated value in the PDD, which is confirmed by interview with project owner and women staff, hence it is reasonable that the actual value is higher than estimated in PDD /1/. For SDG 7 The actual net impact during this monitoring period is 4.15% slightly higher than the estimated value due to the hydro resources fluctuated during the project implementation comparing with the average estimated value in the PDD derived from PDR /9/, which is confirmed by interview with project owner and operation staff. Furthermore, by considering all the accumulated net electricity supplied to the grid by the bundled project from 2009 to 2022, the verification team confirm that the actual value is 6.21% less than the total estimated net electricity value in the registered PDD. Hence it is reasonable that the actual value for this monitoring period is slightly higher than estimated in PDD /1/. For SDG 8 The actual net impact of job created during this monitoring period is lower than the estimated value due to the situation in 2022 is special caused by COVID-19 pandemic comparing with the average estimated value in the PDD, which is confirmed by interview with project owner and staffs, hence it is reasonable that the actual value is lower than estimated in PDD /1/. The actual net impact of salary level during this monitoring period is higher than the estimated range of 1,100-3,773 RMB/month in the PDD, and higher than rural per capita disposable income 1,628 CNY/month in Huaihua City /39/, which is confirmed by interview with project owner and staffs, hence it is reasonable that the actual value is higher than estimated in PDD /1/. For SDG 13 The verification team confirmed that the actual value during this monitoring period was found to be 4.15% higher than ex-ante estimated value the for this project during this monitoring period, refer to above assessment to the SDG 7.
Auditing techniques used in audit of the project	Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, validation report/4/, All the supporting evidence as above for ex ante determined and monitored

	parameters which are used to calculate the actual SDG Impacts VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with key methodological requirements (algorithms and/or formulae used to determine emission reductions), Risk of non-conformity with potential reversal of GHG benefits and other SDG Impacts
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the applied methodology, PDD
Findings	No findings raised in this section.
Conclusion	The actual impacts for SDG 5, SDG7 and SDG13 are slightly higher than the estimated values given in the validated PDD /1/ and SDG 8 job positions is lower and SDG 8 salary level is higher, which is assessed as appropriate and accepted.

3.10. Assessment of safeguarding reporting

Via checking the Section B and C of Transition-Annex /25/, there are three Safeguarding principles need to be monitored which have been assessed as below,

Relevant SDG Indicator/Safeguarding Principle	Safeguarding Principle 4.2
Data/parameter	Water quality
Unit	Level of management
Description	The impact of waste water on local water body in the operation period
Value applied for this monitoring period	No negative impact
Source of data	Stakeholders' questionnaires
Measuring /Reading /Recording frequency	Yearly during the operation period
Monitoring equipment with calibration information	N/A
Means of verification	Data monitoring: The Transition-Annex /25/ states this parameter data derived from filled questionnaires by local stakeholders /23/. Data generation and recording: The waste water during the operation period was monitored by stakeholders' questionnaires. Stakeholders' questionnaires contained questions as follows: 1. Do you think that the waste water produced from the project has unfriendly influence on water quality? 2. Do you think that the solid waste produced from the project has unfriendly influence on local environment?

	3. Do you think that the project operation has unfriendly influence on local biodiversity? The project owner made questionnaires on 15/06/2022 and 15/04/2022 respectively for both projects to ask stakeholders' comments and received 12 (Guanbaodu) and 7 (Liangjiangkou) pieces of Stakeholders' questionnaires replies respectively. The verification team checked the filled questionnaires by local stakeholders /23/ and confirmed by interviews of plant staffs and local stakeholders during site interview. Also, it is verified that all of the 19 stakeholders stated there was no negative impact on local water quality during this monitoring period. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents: • Filled questionnaires by local stakeholders /23/
Auditing techniques used in audit of the project	Conducting site interview with related representatives Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, Transition-Annex /25/, Filled questionnaires by local stakeholders /23/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with core GS4GG principles with respect to Safeguarding Principles
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the PDD, interview with related representatives
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the Safeguarding Principle monitoring plan contained in the Transition-Annex /25/. ✓ The parameter required by the Safeguarding Principle monitoring plan have been sufficiently monitored and correctly listed.

Relevant SDG Indicator/Safeguarding Principle	Safeguarding Principle 4.3
Data/parameter	Solid wastes
Unit	Level of management
Description	Management of the domestic rubbish during the operation period
Value applied for this monitoring period	No negative impact

Source of data	Stakeholders' questionnaires
Measuring /Reading /Recording frequency	Yearly during the operation period
Monitoring equipment with calibration information	N/A
Means of verification	Data monitoring: As per Transition-Annex /25/, The influence of solid wastes during the construction period can be monitored by local stakeholder's comments. The domestic rubbish treatment during the operation period can be monitored by relevant management. The Transition-Annex /25/ states this parameter data derived from filled questionnaires by local stakeholders /23/. Data generation and recording: The solid waste during the operation period was monitored by stakeholders' questionnaires. Stakeholders' questionnaires contained questions as follows: 1. Do you think that the waste water produced from the project has unfriendly influence on water quality? 2. Do you think that the solid waste produced from the project has unfriendly influence on local environment? 3. Do you think that the project operation has unfriendly influence on local biodiversity? The project owner made questionnaires on 15/06/2022 and 15/04/2022 respectively for both projects to ask stakeholders' comments and received 12 (Guanbaodu) and 7 (Liangjiangkou) pieces of Stakeholders' questionnaires replies respectively. The verification team checked the filled questionnaires by local stakeholders /23/ and confirmed by interviews of plant staffs and local stakeholders during site interview. Also, it is verified that all of the 19 stakeholders stated there was no negative impact from solid waste during this monitoring period. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents: • Filled questionnaires by local stakeholders /23/
Auditing techniques used in audit of the project	Conducting site interview with related representatives Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, Transition-Annex /25/, Filled questionnaires by local stakeholders /23/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with core GS4GG principles with respect to Safeguarding Principles

Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the PDD, interview with related representatives
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the Safeguarding Principle monitoring plan contained in the Transition-Annex /25/. ✓ The parameter required by the Safeguarding Principle monitoring plan have been sufficiently monitored and correctly listed.

Relevant SDG Indicator/Safeguarding Principle	Safeguarding Principle 4.3
Data/parameter	Biodiversity (species and habitat conservation)
Unit	Degree of Biodiversity
Description	The impacts of project activity on fish and organism species and habitats
Value applied for this monitoring period	No negative impact
Source of data	Stakeholders' questionnaires
Measuring /Reading /Recording frequency	Yearly during the operation period
Monitoring equipment with calibration information	N/A
Means of verification	Data monitoring: As per Transition-Annex /25/, this parameter can be monitored by stakeholder's questionnaires. The Transition-Annex /25/ states this parameter data derived from filled questionnaires by local stakeholders /23/. Data generation and recording: The solid waste during the operation period was monitored by stakeholders' questionnaires. Stakeholders' questionnaires contained questions as follows: 1. Do you think that the waste water produced from the project has unfriendly influence on water quality? 2. Do you think that the solid waste produced from the project has unfriendly influence on local environment? 3. Do you think that the project operation has unfriendly influence on local biodiversity? The project owner made questionnaires on 15/06/2022 and 15/04/2022 respectively for both projects to ask stakeholders' comments and received 12 (Guanbaodu) and 7 (Liangjiangkou) pieces of Stakeholders' questionnaires replies respectively. The verification team checked the filled questionnaires by local stakeholders /23/ and confirmed by interviews of plant staffs and local stakeholders during site interview. Also, it is verified that all of

	the 19 stakeholders stated there was no negative impact to biodiversity during this monitoring period. Furthermore, through checking the EIA /10/, the verification team confirmed that there will be no considerable effects on fish and organism species and habitats due to the project activity and no extinction of any animals will happen. In addition, via checking the Report for the Examination and Acceptance of Completed Project /11/, the verification team confirmed the measures of ecological conservation have been well implemented. The flow of information from data generation, aggregation, to recording, calculation and reporting was verified by interviews with the key personnels and review of following documents: • Filled questionnaires by local stakeholders /23/ • EIA /10/ • Report for the Examination and Acceptance of Completed Project /11/ QA/QC procedures applied: The EIA /10/ and Report for the Examination and Acceptance of Completed Project /11/ are used to further confirm that measures of ecological conservation have been well implemented so no negative impact to biodiversity during this monitoring period. The verification team confirmed that the QA/QC procedures applied is in accordance with the monitoring plan /25/.
Auditing techniques used in audit of the project	Conducting site interview with related representatives Documents shared by PD during site visit To review: - documentation/documentary evidence(s) MR/2/, PDD/1/, Transition-Annex /25/, Filled questionnaires by local stakeholders /23/ EIA /10/ Report for the Examination and Acceptance of Completed Project /11/ VVB confirmed the selected auditing techniques been sufficient to verify the aspect of the project and sufficient to close the assessment
Any identified risk	Risk of non-conformity with core GS4GG principles with respect to Safeguarding Principles
Mitigation measures implemented to eliminate or reduce risks pertaining to selected auditing technique(s)	Document review of all the supporting evidence and comparing with the PDD, interview with related representatives
Findings	No findings raised in this section.
Conclusion	The verification team confirms that: ✓ The monitoring has been carried out in accordance with the Safeguarding Principle monitoring plan contained in the Transition-Annex /25/.

	✓ The parameter required by the Safeguarding Principle monitoring plan have been sufficiently monitored and correctly listed.

No other added safeguarding is observed.

3.11. Assessment of stakeholder inputs and legal disputes

By onsite interview with the stakeholders and document review, the verification team confirms that the communication channels have been established by the project participant, the questionnaires survey has been carried out for collecting the comments from local stakeholders regularly so that they can raise any questions to the project implementers, in addition, using the grievance book was put in the administration office of the project company which has been checked during site visit, the email access. Up to the date of on-site interview, no grievance or negative comment was received for this monitoring period through checking mentioned communication channels.

4. VERIFICATION STATEMENT

China Certification Center, Inc. (CCCI) has performed the 11th periodic verification belongs to CP2 of Hunan Guanbaodu-Liangjiangkou Small-scale Hydropower Bundle Project, GS4GG Reference Number 835, covering the monitoring period 01/01/2022 to 31/12/2022, and applying methodology ACM0002: "Grid-connected electricity generation from renewable sources", Version 16.0. The verification was performed on the basis of Gold Standard for the Global Goals (GS4GG) criteria, UNFCCC criteria for the CDM, and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The verification consisted of the following three phases: i) desk review of the project design, monitoring report and additional background documents; ii) remote interviews with project stakeholders; iii) resolution of outstanding issues and the issuance of the final verification report and opinion.

CCCI has verified the project Monitoring Report Version 01 dated 06/06/2023 for the monitoring period as indicated above. CCCI confirms that the Project is implemented as described in the registered Project Design Document. Installed equipment being essential for generating emission reductions run reliably and are calibrated appropriately. The monitoring system is in place and the Project is generating SDG impacts as a GS4GG project.

CCCI can confirm that the SDG impact are calculated without material misstatements. Our opinion relates to the Projects' SDG impact reported and related to the validated and registered project baseline, monitoring plan and its associated documents. Based on the evidence and information that are considered necessary to guarantee that SDG impact are appropriately calculated, CCCI confirms the following statement:

SDG Impact	**11th MP**
	01/01/2022 to 31/12/2022
SDG5 - Number of women employees	5 women employees
SDG7 - MWh of renewable energy generated	22,508.696 MWh/year renewable power generation
SDG8 - Number of job positions and training opportunities	17 of job positions and 5 training opportunities
SDG8 - Salary level	Salary level of 4,205 CNY/month
SDG13 – Emissions Reductions	GHG emission Reductions 13,466 t GS VERs

Ms. Guo Jiayuan
Team Leader
24/01/2024

Ms. Li Yiting
Internal Technical Reviewer
24/01/2024

5. COMPETENCE OF TEAM MEMBERS AND TECHNICAL REVIEWERS

Guo Jiayuan	Team Leader	Ms. Guo Jiayuan is an experienced technical expert in the field of climate change and GHG emission reduction. She has more than 10 years' experience in the development and implementation of CDM projects. She has participated in more than 30 CDM projects covering diversified scope, including wind power, hydro power, LNG power generation and biomass cogeneration. By developing project design document and monitoring report, desk review and onsite visit, she gained extensive experience in the whole process of CDM project developing.

Hong Dandan	Verifier	Ms. Hong Dandan has 12 years work experience in CDM projects since 2009. She received comprehensive training of CDM and has participated in more than 50 CDM projects including hydro power, hydro power, CMM, waste heat recovery and CDQ. Her background includes both project validation and verification. Before joining CCCI, Hong Dandan worked with the CDM development company EEA and WWF. Ms. Hong Dandan has completed the CCCI Validation & Verification training course, and has completed internal auditor training in ISO 9001 and ISO14001, and lead auditor training in CDM and ISO 14064.

Li Yiting	Technical Reviewer	Ms. Li Yiting is an environmental engineer with extensive practical experience in the carbon market. She has worked in carbon markets since 2006 and gained extensive experience in the development and implementation of CDM projects, working in the area of project-based mechanisms. Her background includes both project validation and verification, in different sectoral scopes, including renewable energy, waste heat and gas recovery from iron and steel plants or cement plants, landfill gas combustion and utilization projects, coal mine methane, natural gas. She has developed and managed the validation/verification of number of CDM project activities, including experiences in CDM Project Design Document (PDD) development, the monitoring system building, data QA/QC, emission reduction calculation review and documentation review, where she has obtained a good understanding of technical aspects in these sectoral scopes as well as their specific CDM aspects.

6. DOCUMENTS REVIEWED OR REFERENCED

No	Author	Title	References to the document	Provider
1.	PD	GS4GG Project Design document of the project for CP2	Version No. 09, dated 29/03/2016	PD
2.	PD	11th periodic Monitoring Report of the project	- Draft Version No. 01, dated 06/06/2023 - Final Version No. 02, dated 07/09/2023 - Final Version No. 03, dated 18/12/2023 after GS review	PD
3.	PD	11th periodic Emission Reduction Calculation spreadsheet of the project	- Draft Version No. 01, dated 06/06/2023 - Final Version No. 02, dated 07/09/2023	PD
4.	CTI	Validation report of CP2 of the project	Version 1 dated 29/03/2016	N/A
5.	CTI	Periodical verification report of the project	https://registry.goldstandard.org/projects/details/1216	N/A
6.	Huaihua Electric Energy Measurement Center of Hunan Electric Power Company (Guanbaodu) & Hongjiang City food and drug industrial and commercial quality supervision inspection and testing institute (Guanbaodu) & Hunan Province Huaihua Electric Power Bureau Tongdao Electric Power Company (Liangjiangkou)	Calibration certificates	Calibration certificates for all the electricity meters covering this monitoring period	PD
7.	Hunan Province Bureau of Quality & Technical Supervision & Hunan Market Supervision Administration	Certificate of Metrological Authorization	Certificate of metrological authorization to Huaihua Electric Energy Measurement Center of Hunan Electric Power Company, issued by Hunan Province Bureau of Quality & Technical Supervision on 30/04/2020, the valid period is to 29/04/2025	PD

	& Huaihua City Bureau of Quality & Technical Supervision		Certificate of metrological authorization to Hongjiang City food and drug industrial and commercial quality supervision inspection and testing institute issued on 14/10/2019, the valid period is to 13/10/2024 Certificate of Metrological Authorization of Measuring Centre of Hunan Province Huaihua Electric Power Bureau Tongdao Electric Power Company, issued on 26/05/2019, the valid period is to 25/05/2022	
8.	Jingzhou County Administrative Bureau for Industry and Commerce (Guanbaodu) & Tongdao County Administrative Bureau for Industry and Commerce (Liangjiangkou)	Business License	Business License of Jingzhou Miao & Dong Autonomous County Guanbaodu Hydropower Co., Ltd. (project owner of Guanbaodu hydropower project) and Tongdao Dong Autonomous County Liangjiangkou Hydropower Station (project owner of Liangjiangkou hydropower project)	PD
9.	Xiangtan water conversation & hydropower engineering exploration & design institute, Hunan Province (Guanbaodu) And Jingzhou Miao & Dong Autonomous water conversation & hydropower engineering exploration & design institute (Liangjiangkou)	Preliminary Design Report	PDR of Guanbaodu project finished in May 2005 PDR of Liangjiangkou project finished in May 2006	PD
10.	Huaihua Environmental Protection Research Institute	Environment Impact Assessment	EIA of Guanbaodu project finished by Huaihua Environmental Protection Research Institute on 19/10/2005 EIA of Liangjiangkou project finished by Huaihua Environmental Protection Research Institute on 05/07/2006	PD

11.	Huaihua City Environmental Protection Bureau (Guanbaodu) And Hunan Province Huaihua City Tongdao Hydropower Check and Accept Commission (Liangjiangkou)	Report for the Examination and Acceptance of Completed Project	Acceptance of Environmental Protection of Guanbaodu project issued by Hunan Province Huaihua City Environmental Protection Bureau dated 06/02/2013. Acceptance of Environmental Protection of Liangjiangkou project issued by Hunan Province Huaihua City Tongdao Hydropower Check and Accept Commission dated in Dec. 2009.	PD
12.	Manufactures of equipment	Equipment technical specification	Equipment technical specification for hydro turbine generator as provided in the nameplate of hydro turbines and generators	PD
13.	Hunan Province Huaihua City Jingzhou Power Company (Guanbaodu) And Hunan Province Huaihua City Tongdao Power Company (Liangjiangkou)	Power Purchase Agreement	Power Purchase Agreement signed by the Guanbaodu project owner with Hunan Province Huaihua City Jingzhou Power Company covering this monitoring period; Power Purchase Agreement signed by the Liangjiangkou project owner with Hunan Province Huaihua City Tongdao Power Company covering this monitoring period	PD
14.	PP	LOG	Operation and management of project logs	PD
15.	PP	Meter Reading Records	Meter Reading Records of this monitoring period which was confirmed by the grid company Gateway Meter M2 of Guanbaodu, Backup Meter M1 of Guanbaodu, Gateway Meter M1 of Liangjiangkou	PD
16.	Huaihua City Jingzhou Power Company (Guanbaodu) And Huaihua City Tongdao Power Company (Liangjiangkou)	Electricity Sales and Purchase Invoices	Electricity Sales and Purchase Invoices for both projects during this monitoring period	PD
17.	Huaihua City Jingzhou Power Company (Guanbaodu) And Huaihua City Tongdao Power Company (Liangjiangkou)	Electricity Transaction Notes	Electricity Transaction Notes covering this monitoring period ***Guanbaodu Project*** • Monthly electricity transaction notes of Meters M2 ***Liangjiangkou Project*** • Monthly electricity transaction notes of Meters M1	PD
18.	Jingzhou Miao and Dong	Proof of Area of Reservoir	Measurement Report of reservoir area for Guanbaodu project by	PD

	Autonomous County Hydro Management Station (Guanbaodu) And Tongdao Dong Autonomous County Water Conservancy Bureau (Liangjiangkou)		Jingzhou Miao and Dong Autonomous County Flood Control and Drought Prevention Office, dated 23/06/2022 for this monitoring period Measurement Report of reservoir area for Liangjiangkou project by Tongdao Dong Autonomous County Reservoir and Immigration Authority dated 01/06/2022 for this monitoring period	
19.	PP	Monitoring Manual	Monitoring Manual for the project activity and project site management rules and regulations for each power plant	PP
20.	PP	Monthly payroll	Monthly Payroll of Every Staff for Guanbaodu Project for this monitoring period Monthly Payroll of Every Staff for Liangjiangkou Project for this monitoring period	PD
21.	PP	Salary Receipts	Salary Receipts of both plants	PD
22.	PP	Training Records	Technical Training Records of project • Technical Training Records Guanbaodu dated 21/03/2022, 31/08/2022, 28/10/2022 and 01/12/2022 • Technical Training Records Liangjiangkou dated 15/04/2021	PD
23.	PP and local stakeholders	Stakeholder questionnaires	19 filled questionnaires by local stakeholders	PD
24.	General Administration of Quality Supervision, Inspection and Quarantine	DL/T448-2016	Technical Administrative Code of Electricity Energy Metering	Public Website
25.	PD	Transition-Annex for this project	GS4GG approved Transition Annex of “Hunan Guanbaodu-Liangjiangkou Small-scale Hydropower Bundle Project”	PD
26.	Ministry of Ecology and Environment of China	China cap & trade scheme	http://www.mee.gov.cn/xxgk2018/xxgk/xxgk02/202101/t20210105_816131.html	Public Website
27.	Ministry of Ecology and Environment of China	Enforced company list	http://mee.gov.cn/xxgk2018/xxgk/xxgk03/202012/W020201230736907682380.pdf	Public Website
28.	PP	Declaration of no double counting	Declaration of No Double Counting and not involved in other carbon scheme Statement issued on 15/09/2022	PD

29.	CCCI	Site Visit Photo	Photo taken by verification team during site visit including main equipment, monitoring devices, control room, Grievance Expression Process Book etc.	N/A
30.	UNFCCC	CDM Approved Small Scale Methodology ACM0002	"ACM0002 Grid-connected electricity generation from renewable sources" (Version 16.0.0)	UNFCCC website
31.	UNFCCC	Methodological tool	Tool to calculate the emission factor for an electricity system (Version 05.0)	UNFCCC website
32.	GS	GS4GG MR template	Gold Standard for the Global Goals Monitoring Report (MR) Template, version 1.1 in October 2020	GS Website
33.	GS	Gold Standard for the Global Goals Principles and Requirements	Version 1.2	GS Website
34.	GS	Gold Standard for the Global Goals Safeguarding Principles & Requirements	Version 1.2	GS Website
35.	GS	Gold Standard for the Global Goals Community Services Activity Requirements	Version 1.2	GS Website
36.	GS	Gold Standard for the Global Goals Stakeholder Consultation and Engagement Requirements	Version 2.1	GS Website
37.	GS	GS4GG GHG Emissions Reduction & Sequestration Product Requirements	Version 2.1	GS Website
38.	GS	Gold Standard for the Global Goals Validation and Verification Standard	Version 1.0	GS Website
39.	Hunan Statistic Bureau	Rural per capita disposable income of Huaihua City in 2022	http://hnzd.stats.gov.cn/dcsj/lssj/2022lssj/202302/t20230222_218886.html	Public website
40.	China government	NDC	https://www.gov.cn/xinwen/2015-06/30/content_2887330.htm	Public website

7. CLARIFICATION REQUESTS, CORRECTIVE ACTION REQUESTS AND FORWARD ACTION REQUESTS

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

FAR ID	1	**Section no.**	-	**Date:** 19/07/2023
Description of FAR				
PAR 5.1.39: An annual report shall be submitted for each monitoring year by the end of next calendar year for which verification is not completed. If a verification is in progress but not completed, then an Annual Report is still required by the end of calendar year.				
Project participant response				**Date:** 07/09/2023
As per GS4GG Principles & Requirement 5.1.39, an annual report shall be submitted for each monitoring year by the end of next calendar year for which verification is not completed. As per GS4GG Principles & Requirement 5.1.32, Performance review is conducted by Gold Standard following success completion of Verification. Since Performance review of this project has been conducted which means that the verification for this period has successfully completed, there is no need to submit Annual Report.				
Documentation provided by project participant				
-				
VVB assessment				**Date:** 08/09/2023
CCCI has confirmed related clarification is correct. Due to performance review of this project has been conducted which means that the verification for this period has successfully completed, there is no need for PD to submit Annual Report. The FAR 01 is therefore closed.				

FAR ID	2	**Section no.**	-	**Date:** 19/07/2023
Description of FAR				
The crosscheck method mentioned for the monitoring parameters EG_{export} and EG_{import} is not transparently mentioned in the registered monitoring plan, whereas the MR/ER sheet specifies this as the Min (Reading records, ETN) for export and Max (Reading records, ETN). The verifying VVB for the next verification shall check for deviation with respect to the monitoring plan. PD shall submit the post registration changes if any from the registered monitoring plan for the next periodic verification.				
Project participant response				**Date:** 07/09/2023
This has been responded in Section B.2.4 of the MR as the following. The crosscheck method mentioned for the monitoring parameters EG_{export} and EG_{import} is not transparently mentioned in the registered monitoring plan, whereas the MR/ER sheet specifies this as the Min (Reading records, ETN) for export and Max (Reading records, ETN). In order to clarify the crosscheck method, there will be a design change of monitoring plan for this project. The project developer may choose to submit a request for approval of Design Change, following any of the below approval tracks and applicable requirements for VVB opinion. This project chose Issuance track to submit the request for approval of Design Change. In the registered monitoring plan, it is mentioned that Electricity monitored by metering data should be crossed checked by electricity sales receipt. However, it is not specified that the value of Min (Reading records, ETN) for export and Max (Reading records, ETN) for import is taken. During the monitoring period, the Min (Reading records, ETN) for EG_{export} and Max (Reading records, ETN) for EG_{import} are used when calculating the emission reductions. To be specific, this change will not influence the calculation of emission reduction in monitoring plan. It is a description supplemented to the monitoring plan. This is a conservative way to calculate emission reductions for the project and is in line with the requirements of the applied methodology, feasible and implementable within the project design - data management and quality assurance and quality control procedures. The assessment of the impacts of the design change:				

Aspects	Impacts
Additionality of the project activity	No impact
Applicability of the methodology and other methodological regulatory documents with which the project activity has been certified	The change specified the exact way of the crosscheck method. It is more conservative and applied the methodology and other methodological regulatory documents better.
Compliance with the monitoring plan and the applied methodology	The change specified the exact way of the crosscheck method. It complied with the monitoring plan and the applied methodology better.
Level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the design certified monitoring plan	The change specified the exact way of the crosscheck method. The more conservative value is used. It is more accurate and more complete.
Scale of the project activity	No impact
Stakeholder consultation	No impact
Sustainable development criteria	No impact
Safeguarding assessment	No impact
Legislation	No impact

Documentation provided by project participant

-

VVB assessment **Date:** 08/09/2023

CCCI has checked the updated MR and confirmed related clarification has been added.

Via checking the registered PDD, the verification team is able to confirm that Electricity monitored by metering data should be crossed checked by electricity sales receipt. However, it is not specified that the value of Min (Reading records, ETN) for export and Max (Reading records, ETN) for import should be taken.

For conservative principle, when ER is calculated, the MR/ER sheet specifies this as the Min (Reading records, ETN) for export and Max (Reading records, ETN).

So PD has submitted a request for approval of Design Change for the permanent change of monitoring plan in this monitoring period by an issuance track. During the monitoring period, the Min (Reading records, ETN) for EG_{export} and Max (Reading records, ETN) for EG_{import} are used when calculating the emission reductions.

PD has submitted a changed PDD with related monitoring plan changed with the cross-check method and VVB has assessed the change will not influence the calculation of emission reduction in monitoring plan. It is just a description supplemented to the monitoring plan. This is a conservative way to calculate emission reductions for the project and is in line with the requirements of the applied methodology, feasible and implementable within the project design - data management and quality assurance and quality control procedures.

Furthermore, by considering this change, it is confirmed that this design change will not impact the below aspects which are requested in the GS4GG Design-change-requirements version 1.1.

Aspects	Impacts
Additionality of the project activity	Not relevant, so no impact
Applicability of the methodology and other methodological regulatory documents with which the project activity has been certified	The change is just a description supplemented to the monitoring plan. This is a conservative way to calculate emission reductions for the project and is in line with the requirements of the applied methodology

Compliance with the monitoring plan and the applied methodology	The change is just a description supplemented to the monitoring plan. This is a conservative way to calculate emission reductions for the project and is in line with the requirements of the applied methodology
Level of accuracy and completeness in the monitoring of the project activity compared with the requirements contained in the design certified monitoring plan	More accurate for monitoring results and conservative for ER calculation.
Scale of the project activity	Not relevant, so no impact
Stakeholder consultation	Not relevant, so no impact
Sustainable development criteria	Not relevant, so no impact
Safeguarding assessment	Not relevant, so no impact
Legislation	Not relevant, so no impact

The FAR 02 is therefore closed.

Table 1. CL from this verification

CL ID	1	**Section no.**	C	**Date:** 19/07/2023
Description of CL				
In section C, PP stated "The electricity during 21-Dec-2021 to 31-Dec-2021 has been deducted from the data on 20-Jan-2022" which is not clarified clearly by how to deduct from the data on 20-Jan-2022.				
Project participant response				**Date:** 07/09/2023
The electricity generated from 21/12/2021 to 31/12/2021 has been counted and calculated in the tenth monitoring period from 01/01/2021 to 31/12/2021 and has been deducted from the ETN on 20/01/2022, which has been confirmed by the local power grid company. Please refer to the ER calculated spreadsheet for details.				
Documentation provided by project participant				
/2/-version 02				
VVB assessment				**Date:** 08/09/2023
CCCI has checked the updated MR and confirmed related clarification has been added. The meter readings are recorded by the monitoring staffs and grid company /15/ were summarized to create monthly Electricity Transaction Notes /17/. Based on monthly reports, the verification team calculated the data aggregation completely independent from the calculation provided by the PP. 100% of the monthly reports have been verified. The values have been checked with monthly electricity purchase invoice /16/ and verified as consistent for each month except from 21/12/2021 to 31/12/2021 of Guanbaodu Project, for this period, the electricity generated from 21/12/2021 to 31/12/2021 has been counted and calculated in the tenth monitoring period from 01/01/2021 to 31/12/2021 and has been deducted from the ETN on 20/01/2022, which has been confirmed by the local power grid company, it is confirmed that the correct and conservative value has been used for ER calculation. The CL 01 is therefore closed.				

Table 2. CAR from this verification

CAR ID	1	**Section no.**	C	**Date:** 19/07/2023
Description of CAR				
In section C, for the Liangjiangkou project, the data recording method and date is missing.				
Project participant response				**Date:** 07/09/2023

The readings of M1 were recorded in daily log by the technical staff at the power station every day. The general recording date is 20th of each month from 01/01/2022 to 20/06/2022 and is the last day of each month from 21/06/2022 to 31/12/2022. The electricity generated from 21/12/2021 to 31/12/2021 has been counted and calculated in the tenth monitoring period from 01/01/2021 to 31/12/2021 and has been deducted from the ETN on 20/01/2022, which has been confirmed by the local power grid company. Please refer to the ER calculated spreadsheet for details. The relevant data came from PO's reading records which have been confirmed by the grid company. All data will be archived for at least 2 years after the end of the last crediting period.
Documentation provided by project participant
/2/-version 02
VVB assessment **Date:** 08/09/2023
CCCI has checked the updated MR and confirmed the revision is correct. The Gateway meter M1 for Liangjiangkou project is installed at the Shuangjiang Transformer Station and owned by local power company with accuracy of 0.5s and recorded monthly at 24:00h 20th of each month till June 2022 and recorded monthly at 24:00h last day of each month since July 2022 which is confirmed by checking the Meter readings are recorded by the monitoring staffs and grid company /15/ and Electricity Transaction Notes /17/. The CAR 01 is therefore closed.

CAR ID	2	**Section no.**	D.2	**Date:** 19/07/2023
Description of CAR				
In section D.2, for the monitoring parameter Training opportunities (human and institutional capacity), the number of training opportunities is missing.				
Project participant response				**Date:** 07/09/2023
The number of training opportunities for bundled project is 5. Guanbaodu for 4 times and Liangjiangkou for once. It has been corrected and supplemented.				
Documentation provided by project participant				
/2/-version 02 /22/				
VVB assessment				**Date:** 08/09/2023
CCCI has checked the updated MR and confirmed the revision is correct. The number of training opportunities is added and verified by checking the Training records /22/. The CAR 02 is therefore closed.				

CAR ID	3	**Section no.**	D.2	**Date:** 19/07/2023
Description of CAR				
In section E.2, for the project impact to SDG 8, the number of training opportunities for Guanbaodu project is not consistent with the actual value, revision is requested.				
Project participant response				**Date:** 07/09/2023
It is confirmed that the number of training opportunities for Guanbaodu project is 4 times and the total number for the bundled project is 5 times.				
Documentation provided by project participant				
/2/-version 02				
VVB assessment				**Date:** 08/09/2023
CCCI has checked the updated MR and confirmed the revision is correct. The number of training opportunities is corrected and verified by checking the Training records /22/. The CAR 03 is therefore closed.				

No FAR from this verification