NINGXIA ANGLI LINGWU PHOTOVOLTAIC GRID CONNECTED POWER PLANT PROJECT

Document Prepared By LGAI Technological Center, S.A. (Applus+ Certification)

Project Title	Ningxia Angli Lingwu Photovoltaic Grid Connected Power Plant Project
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Report Title	Ningxia Angli Lingwu Photovoltaic Grid Connected Power Plant Project
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Approved By	LGAI Technological Center S.A. (Applus+ Certification) VVB Technical Manager: Mr. Agustín Calle de Miguel
Work Carried Out By	Lead Auditor / Technical Expert: Doris Dai Technical Reviewer: Simon Shen

Summary:

LGAI Technological Center, S.A. (hereafter referred to as "Applus+ Certification") has been commissioned by Climate Bridge (Shanghai) Ltd. to perform the verification of greenhouse gas emission reductions of the project activity "Ningxia Angli Lingwu Photovoltaic Grid Connected Power Plant Project" (VCS Ref. No. 1143, hereafter referred to as "the project activity") reported in the monitoring report /1/ during monitoring period 01/12/2018 to 31/03/2021.

The project has been registered as a VCS project which is available at https://registry.verra.org/app/projectDetail/VCS/1143.

The project activity is a solar power project located at Baitugang Country, Lingwu City, Ningxia Hui Autonomous Region, People's Republic of China which is to use solar resource for electricity generation. The installed capacity of the project activity is 39MWp, consisting of 15,792 pieces of solar modules with 190W of unit capacity, 150,264 pieces of solar modules with 235W of unit capacity and 4,280 pieces of solar modules with 240W of unit capacity. The average annual power delivered to the grid by the project is expected to be 54,000 MWh in the first 10 years. The Project can reduce GHG emissions by replacing the electricity generated by fossil fuel fired power plants Northwest China Power Grid (NWPG). It's estimated that the project could achieve GHG emission reductions of 48,402 tCO_2e annually in the first 10 years.

The purpose and scope of this verification is to ensure that reported emission reductions are complete and accurate in accordance with applicable VCS standards and relevant UNFCCC requirements in order to be certified. A desk review and a site visit have been conducted to verify the data submitted in the monitoring report /1/. Applus+ Certification confirms the following has been reviewed:

- Monitoring plan included in the registered PD /3/ version 02 dated 16/10/2013;
- VCS Validation and Verification Report /04/, version 2.0 dated 16/10/2013;
- Approved methodology, ACM0002 /9/, version 13.0.0, dated 11/05/2012;
- Registered CDM PDD /15/, version 02 dated 19/10/2012;

- Validation Report of registered CDM PDD /16/, version 01 dated 05/11/2012;
- CDM PDD for renewal of crediting period /17/, version 04 dated 30/06/2019;
- Validation Report of renewed CDM PDD /18/. version 02 dated 10/07/2019;
- VCS standards and guidance version 4.0, as well as relevant UNFCCC requirements;
- All information and references relevant to the project activity's resulting in emission reductions.

During this verification, no finding was identified related to the monitoring, implementation or operations of the project activity in relation to relevant VCS standards, guidance and UNFCCC requirements and relevant host party criteria and the applied baseline and monitoring methodology etc.

Applus+ Certification confirms that the project is implemented in accordance with the registered PD /3/. The monitoring plan complies with the applied methodology ACM0002 /7/ version 13.0.0 and the monitoring has been carried out in accordance with the monitoring plan in the registered PD /3/. The monitoring system is in place and the emission reductions are calculated without material misstatements. The level of assurance of the verification is reasonable. Our opinion relates to the projects GHG emissions and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information reviewed and evaluated Applus+ Certification confirms that the implementation of the project has resulted in 107,929 tCO_2e emission reductions during period 01/12/2018 to 31/03/2021.

CONTENTS

1 INTRODUCTION

1.1 Objective

LGAI Technological Center, S.A. (Applus+ Certification) has been commissioned by Climate Bridge (Shanghai) Ltd. to perform the verification of greenhouse gas emission reductions of the project activity "Ningxia Angli Lingwu Photovoltaic Grid Connected Power Plant Project" (VCS Ref. No. 1143) reported in the Monitoring Report /1/ during monitoring period 01/12/2018 to 31/03/2021.

LGAI Technological Center, S.A. (Applus+ Certification) as the verification body of the project activity has been accredited as a DOE by UNFCCC and also meets the competence requirements as set out in ISO 14065:2007.

The objective of verification is to have an independent review and ex post determination by a Designated Operational Entity (DOE) of the monitored reductions in GHG emissions that have occurred as a result of the registration of VCS project. Certification is the written assurance by the DOE that, during a specific time period, a proposed VCS project activity achieved the reductions in anthropogenic emissions by sources of GHGs as verified.

The objective of this verification/certification is to verify and certify emission reductions, reported for the "Ningxia Angli Lingwu Photovoltaic Grid Connected Power Plant Project" in China for the period 01/12/2018 to 31/03/2021.

1.2 Scope and Criteria

The verification scope is defined as an independent and objective review of the registered PD, the Project's baseline study and Monitoring Report (MR) and other relevant documents. The information in these documents is reviewed against VCS Version 4.0 requirements, UNFCCC rules and associated interpretations.

The verification is not meant to provide any consulting towards the client. However, stated requests for forward actions and/or corrective actions may provide input for improvement of the Project monitoring towards reductions in the GHG emissions.

1.3 Level of Assurance

The verification report is based on the VCS-PD, the VCS Monitoring Report (MR), supporting evidences made available to the verifier and information collected through performing interviews and during the on-site assessment.

The verification conclusion is assured a reasonable level of assurance.

1.4 Summary Description of the Project

<table>
<tr><td>Project title</td><td>Ningxia Angli Lingwu Photovoltaic Grid Connected Power Plant Project</td></tr>
<tr><td>VCS reference number</td><td>1143</td></tr>
<tr><td>Project Participants</td><td>Datang Angli (Lingwu) New Energy Co., Ltd. (Project Owner, host country, P. R. China)</td></tr>
<tr><td>Location of the project</td><td>Baitugang Country, Lingwu City, Ningxia Hui Autonomous Region, People's Republic of China
Geographic coordinates:
<table>
<tr><th>Point</th><th>Longitude</th><th>Latitude</th></tr>
<tr><td>A</td><td>106°21′49.52″E</td><td>37°48′24.42″N</td></tr>
<tr><td>B</td><td>106°22′28.03″E</td><td>37°48′03.59″N</td></tr>
<tr><td>C</td><td>106°22′17.99″E</td><td>37°47′28.31″N</td></tr>
<tr><td>D</td><td>106°21′25.18″E</td><td>37°47′50.96″N</td></tr>
</table></td></tr>
<tr><td>Project start date</td><td>Operation start date: 28/12/2011</td></tr>
<tr><td>Version of VCS PD</td><td>version 02 dated 09/10/2013</td></tr>
<tr><td>Monitoring period</td><td>01/12/2018 to 31/03/2021</td></tr>
<tr><td>First monitoring report</td><td>Version 1.0 dated 30/05/2021</td></tr>
<tr><td>Final monitoring report</td><td>Version 1.1 dated 16/06/2021</td></tr>
<tr><td>Applied Methodology/Version</td><td>ACM0002, version 13.0.0, dated 11/05/2012</td></tr>
<tr><td>Scope/Technical Area</td><td>1/1.2</td></tr>
</table>

The project activity is a solar power project located at Baitugang Country, Lingwu City, Ningxia Hui Autonomous Region, People's Republic of China which is to use solar resource for electricity generation. The installed capacity of the project activity is 39MWp, consisting of 15,792 pieces of solar modules with 190W of unit capacity, 150,264 pieces of solar modules with 235W of unit capacity and 4,280 pieces of solar modules with 240W of unit capacity. The average annual power delivered to the grid by the project is expected to be 54,000 MWh in the first 10 years. The Project can reduce GHG emissions by replacing the electricity generated by fossil fuel fired power plants Northwest China Power Grid (NWPG). It's estimated that the

proposed project could achieve GHG emission reductions of 48,402 tCO2e annually in the first 10 years.

The project has been registered as a VCS project which is available at https://registry.verra.org/app/projectDetail/VCS/1143.

2 VERIFICATION PROCESS

2.1 Method and Criteria

Verification was conducted using Applus+ Certification's procedures in line with the requirements specified in the VCS Standard version 4.1, CDM M&P, the latest version of the CDM Validation and Verification Standard, and relevant UNFCCC requirements and applying standard auditing techniques.

Applus+ Certification completed a strategic review and risk assessment of the projects activities and processes in order to gain a full understanding of:

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

Applus+ Certification verified the implementation of the monitoring plan and the data presented in the Monitoring Report /1/ for the period in question. This involved a site visit and a desk review of the Monitoring Report. This Verification Report describes the findings of this assessment.

The information of the assessment team is included in below:

Assessment team

According to the sectoral scopes / technical area and experiences in the sectoral or national business environment, Applus+ Certification has composed a project assessment team in accordance with the appointment rules in Applus+ Certification. The composition of assessment team has to be approved by the Applus+ Certification ensuring that the required skills are covered by the team. The four qualification levels for team members that are assigned by formal appointment rules as below:

- Leader Auditor (LA)
- Auditor (A)/ Auditor Trainee (AiT)

- Technical Reviewer (TR)

- Technical Experts (TE)

Name	Qualification	Coverage of scope	Coverage of Technical Area	Host country experience
Doris Dai	*LA/TE*	*Y (1.2)*	*Y*	*Y*
Simon Shen	*TR*	*Y (1.2)*	*Y*	*Y*

Doris Dai (Master's Degree in Environmental Sciences, Bachelor's Degree in Environmental Technology) is an Auditor appointed by Applus+ LGAI for the GHG project assessment and auditing. She has more than 6 years of work experience in CDM/VCS project assessment. Before she joined Applus+ LGAI, she has been working for CTI Certification as senior GHG Auditor for 3.5 years. Ms. Doris Dai is based in Beijing, China. Ms. Doris Dai may participate as part of the Audit Team as Lead Auditor and Technical Expert.

Simon Shen (Master's Degree in Thermal Energy Engineering, Bachelor's Degree in Environmental Engineering) is an Auditor appointed by Applus+ LGAI for the GHG project assessment, auditing and technical review. He has more than 6 years of work experience in CDM/GS4GG/VCS project assessment and review with Applus+, apart from the years of experience working as GHG Auditor and ISO 9001/14001 in TUV SUD for 3.5 years before he joined Applus+. Mr. Simon Shen has extensive experience also as former Applus+ Shanghai CDM Technical Manager.

2.2 Document Review

The VCS monitoring report /1/ Version 1.0 dated 30/05/2021, Version 1.1 dated 16/06/2021 and the emission reduction calculations spreadsheet /2/, were assessed as part of the verification. In addition, the registered PD /3/ version 02 dated 09/10/2013 in particular the baseline estimations and the monitoring plan, and the VCS Validation and Verification Report /04/ version 2.0 dated 16/10/2013, registered CDM PDD /15/ version 02 dated 19/10/2012, Validation Report of registered CDM PDD /16/ version 01 dated 05/11/2012, CDM PDD for renewal of crediting period /17/ version 04 dated 30/06/2019, Validation Report of renewed CDM PDD /18/ version 02 dated 10/07/2019, monitoring report and verification report of previous monitoring periods, as well as relevant documents, were reviewed. A detailed documents reviewed are listed in Annex 1 of the report.

2.3 Interviews

The key personnel interviewed are summarized in the table below:

Interviewed personnel	Role	Organization	Subject
Mr. Hao Hai	General Manager	New Energy Division of Datang Angli (Lingwu) New Energy Co., Ltd.	Operation of the project activity; Implementation of the monitor plan of the project activity; Data collection and data achievement; Calibration of meters and equipment maintenance;
Ms. Yao Junxiu	Vice General Manager	New Energy Division of Datang Angli (Lingwu) New Energy Co., Ltd.	
Mr. Yin Feiyue	Vice Director	Planning and Marketing Department of New Energy Division of Datang Angli (Lingwu) New Energy Co., Ltd.	
Mr. Chen Yu	Vice Director	Planning and Marketing Department of New Energy Division of Datang Angli (Lingwu) New Energy Co., Ltd.	
Mr. Wu Shaohua	Villager	Local resident	The impact of the project activity; The complaint by local stakeholders; The stakeholder consultation during the operation of the project activity.
Mr. Wu Shaoxiang	Villager	Local resident	
Mr. Chen Jun	Director	Climate Department of Local Environment Protection Bureau	
Mr. Huang Chunbin	Project Manager	Climate Bridge (Shanghai) Ltd.	Data collection and ER calculation.

2.4 Site Inspections

The assessment team performed the on-site verification (Baitugang Country, Lingwu City, Ningxia Hui Autonomous Region, People's Republic of China) on 11/06/2021. The interviewed personnel and objective are listed in above table.

2.5 Resolution of Findings

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

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

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

b) Modifications to the implementation, operation and monitoring of the project activity has not been sufficiently documented by the project participants;

c) Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;

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

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

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

There is no CARs and CLs raised for this monitoring period for the project.

2.5.1 Forward Action Requests

None FAR was raised during the verification process. Also there are no remaining from former verification and validation.

2.6 Eligibility for Validation Activities

Not applicable as LGAI Technological Center, S.A. holds the accreditation for the validation and verification for projects under scope 1.

3 VALIDATION FINDINGS

3.1 Participation under Other GHG Programs

Through reviewing registered CDM PDD /15/ and Validation Report of registered CDM PDD /16/, it was validated that the project has been registered as a CDM project activity with reference No. 8251. Through reviewing the registered PD /3/ and VCS Validation and Verification Report /04/, it was validated that the project has been registered as a VCS project with reference No. 1143. Except CDM and VCS scheme, The project does not participate in the other emissions trading program by checking public information on Internet and interviewing with project owner.

During the monitoring period from 01/12/2018 to 31/03/2021, the project would claim only for VCUs.

Therefore, Applus+ Certification consider the project is eligible to participate under the VCS Program as there is no double counting for the emission reduction during any period.

3.2 Methodology Deviations

Not applicable as not deviation for methodology.

3.3 Project Description Deviations

The project was registered under CDM scheme on 21/11/2012 with reference number of 8251. According to CDM standard, the first crediting period is 01/12/2012 - 30/11/2019, which could be renewed twice. And a renewal has been done, the second crediting period is from 01/12/2019 - 30/11/2026.The project was registered under VCS scheme in 2013. In the VCS PD, the project commission date is 28/12/2011 and start date of crediting period is chosen as 28/12/2011. However, in the monitoring report, the crediting period was set as from 28/12/2011 - 27/12/2021. The project is registered under VCS Version 3 and completed validation before 19/03/2020. As per VCS requirement, it remains eligible to apply the crediting period requirements under VCS 3 which shall be a maximum of ten years and may be renewed at most twice. Therefore, the first crediting period of project has been determined as 28/12/2011 - 27/12/2021. The deviation has no impact for the applicability of the methodology, additionality or the appropriateness of the baseline scenario and meet all appropriate rules and requirements of VCS standard. The same has been described in the monitoring report of previous monitoring period and confirmed in its relevant Verification Report.

The assessment team confirmed that except crediting period related deviations, there were no project description deviations identified by the assessment team to this monitoring period.

3.4 Grouped Project

Not applicable as not a grouped project.

4 VERIFICATION FINDINGS

4.1 Project Implementation Status

By means of on-site visit, the assessment team confirms that all physical features of the project activity proposed in the registered PD /3/ are in place and the PP has operated the project as per registered PD /3/. The installed capacity of the project activity is 39MWp, consisting of 15,792 pieces of solar modules with 190W of unit capacity, 150,264 pieces of solar modules with 235W of unit capacity and 4,280 pieces of solar modules with 240W of unit capacity. The electricity generated is transmitted to Ningxia Power Grid, which was then exported to NWPG. The project activity was expected to supply 54,000 MWh of electricity to the grid annually in the first 10 years. The commissioning time was 28/12/2011 verified by site visit interview and checking VCS Validation and Verification Report /4/ version 2.0 dated 16/10/2013. There are no changes on the key equipment and technology since the validation and previous verification of the project. No special event which would affect the monitoring of the project has been observed during the monitoring period. The implementation of project is in line with the description of registered PD.

The emission reduction resulted from the project during this monitoring period would apply for VCUs. There are no other forms of environmental credits applied or issued for the project activity during this monitoring period. Except CDM and VCS scheme, the project has not been participated or been rejected under any other GHG programs since validation or previous verification. The project would contribute to sustainable development in Job creation, Reduction in GHG emissions, Reduction of fossil fuel use and Increase of power supply aspects confirmed during site visit.

The technical parameters have been verified with the nameplates /9 / as below:

Monocrystalline Silicon Cell

Parameters	Unit	Value	
PV Module Type		JAM5(L)-72-190	ATP-190
Capacity	W	190	190
Pieces		10560	5232
Open circuit voltage (Voc)	V	44.87	44.5
Max. power voltage (Vmp)	V	36.48	36.5
Short circuit current (Isc)	A	5.54	5.69
Max. power current (Imp)	A	5.21	5.20
Maximum system voltage	V	1000	1000
Lifetime	Years	25	25
Manufacturer		JA Solar	ATSUN

Polycrystalline Silicon Cell

Parameters	Unit	Value		
PV Module Type		JAP6-60-235	ATP-235	JAP6-60-240
Capacity	W	235	235	240
Pieces		117640	32624	4280
Open circuit voltage (Voc)	V	37.34	37.5	37.45
Max. power voltage (Vmp)	V	29.52	30.5	29.58
Short circuit current (Isc)	A	8.40	8.70	8.50
Max. power current (Imp)	A	7.96	7.70	9.10
Maximum system voltage	V	1000	1000	1000
Lifetime	Years	25	25	25
Manufacturer		JA Solar	ATSUN	JA Solar

Inverters

Parameters	Unit	Value
Max. Input voltage range	V	800-900
max. Input voltage range	A	1100-1200
rated output voltage range	V	210-310
Max Efficiency	%	≥98.0
Cooling Mode		Air-cooled
Lifetime	years	25
Manufacturer		Sun Grow

By comparing the actual ER claimed in this monitoring period with the estimate in the registered PD, the actual emission reductions (107,929 tCO_2e) are lower than what is stated in the registered PD (i.e. 112,982 tCO_2e, equals to annual emission reductions, 48,402 tCO_2e multiplied by the actual operational days (852 days) then divided by 365 days) which surely will not lead to the overestimation of VERs.

The assessment team confirmed that there is no proposed or actual change to the project design during this monitoring period.

All required equipments and procedures are available and implemented in an appropriate manner.

All necessary monitoring instruments are installed. All required instruments including standby and operating procedures for the same have been implemented in an appropriate manner.

The project is completely operational and the same has been confirmed on-site. Neither mistakes nor malfunction on main meters have been observed during this monitoring period.

4.2 Safeguards

4.2.1 No Net Harm

By checking the EIA summary and conclusion provided in the registered PD, it is confirmed that solar power is green power and the impact caused by solar power on the surrounding ecosystem and residents, water, and atmosphere etc. is very little, there would be no net harm caused due to the project activity. Also, the EIA of the project are approved by the government.

Furthermore, no potential environment or social economic matter was found during the site visit. The project is renewable energy project and thus no net harm observed in air or water quality on-site.

4.2.2 Local Stakeholder Consultation

The local stakeholder's consultation was held in Baitugang Country, Lingwu City in September 2011. A survey was arranged through a one-page questionnaire, which was designed to be easily filled in. 40 copies of questionnaire were distributed, and 40 pieces of reply were received. 40 participants filled in the questionnaires included local residents, builders and members of the local authorities. The opinions expressed by the stakeholders were recorded and are available on request.

The stakeholder meeting and the survey showed that the proposed project receives strong support from the local community. They all believe the proposed project will promote local economic development and agree with the project development and construction.

By checking questionnaires, the assessment team confirmed communications with Local stakeholders was being carried out at periodic intervals, ie in December 2020 during this monitoring period. There are no negative comments received for the project. Via interviewing with staff from local environmental protection bureau and local residents during the site visit, it is confirmed by the assessment team that during the implementation stage of this monitoring period, local authority has conducted spot checks on the implementation of the project periodically as per the request from the local governments' regulations.

All such conclusion has been verified through site visit and check registered PD.

4.3 AFOLU-Specific Safeguards

Not applicable as non-AFOLU project.

4.4 Accuracy of GHG Emission Reduction and Removal Calculations

The monitoring has been carried out in accordance with the monitoring plan contained in the registered PD /3/. All parameters were monitored and determined as per the monitoring plan which is listed in below table:

<table>
<tr><td>Data / Parameter:</td><td>$EG_{facility,y}$</td></tr>
<tr><td>Data unit:</td><td>MWh</td></tr>
<tr><td>Description:</td><td>Net electricity supplied by the project activity to the grid in year y</td></tr>
<tr><td>Purpose of the data:</td><td>Calculation of baseline emissions</td></tr>
<tr><td>Parameter value:</td><td><table>
<tr><td>01-12-2018~31-12-2018</td><td>3,234.20</td></tr>
<tr><td>2019</td><td>50,627.27</td></tr>
<tr><td>2020</td><td>54,587.67</td></tr>
<tr><td>01-01-2021~31-03-2021</td><td>11,975.68</td></tr>
</table></td></tr>
<tr><td>Source of data used:</td><td>Net electricity supplied by the project activity to the grid in year y ($EG_{facility,y}$) are calculated by Quantity of electricity supplied by the Project to the grid in year y ($EG_{PJ\ to\ grid,\ y}$) and Quantity of electricity imported from the grid by the Project in year y ($EG_{grid\ to\ PJ,\ y}$) as below:
$EG_{facility,y} = EG_{PJ\ to\ grid,\ y} - EG_{grid\ to\ PJ,\ y}$
For both Quantity of electricity supplied by the Project to the grid in year y ($EG_{PJ\ to\ grid,\ y}$) and Quantity of electricity imported from the grid by the Project in year y ($EG_{grid\ to\ PJ,\ y}$) are all sourced from Meter Reading Records (MRRs) /10/ issued by the project owner, Sales Receipts /11/ issued by power grid company covering monitoring period. The conservative data between MRRs and Sales Receipts will be used to calculate the emission reductions.</td></tr>
<tr><td>Information flow:</td><td>Not applicable as Net electricity supplied by the project activity to the grid in year y ($EG_{facility,y}$) are calculated by Quantity of electricity supplied by the Project to the grid in year y ($EG_{PJ\ to\ grid,\ y}$) and Quantity of electricity imported from the grid by the Project in year y ($EG_{grid\ to\ PJ,\ y}$) as below:
$EG_{facility,y} = EG_{PJ\ to\ grid,\ y} - EG_{grid\ to\ PJ,\ y}$</td></tr>
<tr><td>Monitoring method, frequency and equipments:</td><td>Not applicable as Net electricity supplied by the project activity to the grid in year y ($EG_{facility,y}$) are calculated by Quantity of electricity supplied by the Project to the grid in year y ($EG_{PJ\ to\ grid,\ y}$) and Quantity of electricity imported from the grid by the Project in year y ($EG_{grid\ to\ PJ,\ y}$) as below:
$EG_{facility,y} = EG_{PJ\ to\ grid,\ y} - EG_{grid\ to\ PJ,\ y}$</td></tr>
<tr><td>Calibration:</td><td>Net electricity supplied by the project activity to the grid in year y ($EG_{facility,y}$) are</td></tr>
</table>

<table>
<tr><td></td><td>calculated by Quantity of electricity supplied by the Project to the grid in year y ($EG_{PJ\ to\ grid,\ y}$) and Quantity of electricity imported from the grid by the Project in year y ($EG_{grid\ to\ PJ,\ y}$) as below:
$EG_{facility,y} = EG_{PJ\ to\ grid,\ y} - EG_{grid\ to\ PJ,\ y}$
The calibration information is shown as below /12/:
<table>
<tr><th>Meter</th><th>Calibration date</th><th>Valid until</th></tr>
<tr><td rowspan="3">Main Meter (M1)</td><td>01-12-2018</td><td>30-11-2019</td></tr>
<tr><td>01-12-2019</td><td>30-11-2020</td></tr>
<tr><td>01-12-2020</td><td>30-11-2021</td></tr>
<tr><td rowspan="3">Backup Meter (M2)</td><td>01-12-2018</td><td>30-11-2019</td></tr>
<tr><td>01-12-2019</td><td>30-11-2020</td></tr>
<tr><td>01-12-2020</td><td>30-11-2021</td></tr>
<tr><td rowspan="3">10kV backup line Meter (M3)</td><td>01-12-2018</td><td>30-11-2019</td></tr>
<tr><td>01-12-2019</td><td>30-11-2020</td></tr>
<tr><td>01-12-2020</td><td>30-11-2021</td></tr>
</table>
The calibration was conducted by accredited third parties which is Ningxia Electricity Measurement and Testing Center was accredited by Ningxia Quality and Technical Supervision Bureau valid from 21/06/2016 to 20/06/2021 /13/.</td></tr>
<tr><td>QA/QC procedure:</td><td>Data record will be archived for a period of 2 years after the crediting period to which the records pertain.</td></tr>
<tr><td>Means of verification:</td><td>Data of the parameter was verified by checking MRRs and Sales Receipts. All data is in line with MRRs and Sales Receipts;
Information flow was verified by checking MRRs and Sales Receipts, and all information are consistent;
Monitoring method was verified by site visit, checking calibration certificates, all monitoring method meets the description in the PD;
Calibration was verified by checking calibration certificate and Accreditation certificate, all calibration of monitoring equipment meets the requirement indicated in the PD.</td></tr>
</table>

Data / Parameter:	$EG_{PJ\ to\ grid,\ y}$	
Data unit:	MWh	
Description:	Quantity of electricity supplied by the Project to the grid in year y	
Purpose of the data:	Calculation of baseline emissions	
Parameter value:	01-12-2018~31-12-2018	3,257.00

<table>
<tr><td></td><td>
<table>
<tr><td>2019</td><td>51,082.00</td></tr>
<tr><td>2020</td><td>55,010.96</td></tr>
<tr><td>01-01-2021~31-03-2021</td><td>12,101.33</td></tr>
</table>
</td></tr>
<tr><td>Source of data used:</td><td>For Quantity of electricity supplied by the Project to the grid in year y ($EG_{PJ\ to\ grid,\ y}$) are all sourced from Meter Reading Records (MRRs) /10/ issued by the project owner, Sales Receipts /11/ issued by power grid company covering monitoring period. The conservative data between MRRs and Sales Receipts will be used to calculate the emission reductions.</td></tr>
<tr><td>Information flow:</td><td>2 bidirectional electricity meters (main meter M1 and backup meter M2) installed at the output of the on site booster station were measured continuously, recorded monthly and archived electronically.

Main meter M1 and backup meter M2 are installed at project side which are the monitoring meters belongs to the project owner. However, as per the agreement between local gird company and project owner, a billing meter (belong to local grid company and not available by the project owner) installed at the substation of grid side was used to measure quantity of electricity supplied by the Project to the grid and is the basis of issuing sales receipts by local grid company.

At 24:00 hr of last day of each month, the staff from project developer read the meter reading of main meter M1 and form Monthly Reading Records (MRRs), the grid company read the meter reading of bill meter and then transcribes the data into Sales Receipts.

The data for MRRs and Sales Receipts have been sent to the CDM consulting company for reporting of GHG emission reduction. The conservative one would be used for ER calculation.</td></tr>
<tr><td>Monitoring method, frequency and equipments:</td><td>The parameter was measured continuously and recorded monthly by 2 bi-direction electricity meters installed at the output of the on site booster station during the monitoring period verified by site visit.

See below for the information of 2 bi-direction electricity meters and verified by site visit and checking calibration certificates /12/:
<table>
<tr><th>Meter</th><th>Type</th><th>Serial Number</th><th>Accuracy</th></tr>
<tr><td>Main Meter (M1)</td><td>DSZ331</td><td>0001468380</td><td>0.2s</td></tr>
<tr><td>Backup Meter (M2)</td><td>DSZ331</td><td>0001468381</td><td>0.2s</td></tr>
</table>
The type, serial number and accuracy have been confirmed by site visit.</td></tr>
<tr><td>Calibration:</td><td>The calibration information is shown as below /12/:
<table>
<tr><th>Meter</th><th>Calibration date</th><th>Valid until</th></tr>
<tr><td rowspan="2">Main Meter (M1)</td><td>01-12-2018</td><td>30-11-2019</td></tr>
<tr><td>01-12-2019</td><td>30-11-2020</td></tr>
</table>
</td></tr>
</table>

	<table><tr><td></td><td>01-12-2020</td><td>30-11-2021</td></tr><tr><td rowspan="3">Backup Meter (M2)</td><td>01-12-2018</td><td>30-11-2019</td></tr><tr><td>01-12-2019</td><td>30-11-2020</td></tr><tr><td>01-12-2020</td><td>30-11-2021</td></tr></table> The calibration was conducted by accredited third parties which is Ningxia Electricity Measurement and Testing Center was accredited by Ningxia Quality and Technical Supervision Bureau valid from 21/06/2016 to 20/06/2021 /13/.
QA/QC procedure:	Data record will be archived for a period of 2 years after the crediting period to which the records pertain.
Means of verification:	Data of the parameter was verified by checking MRRs and Sales Receipts. All data is in line with MRRs and Sales Receipts; Information flow was verified by checking MRRs and Sales Receipts, and all information are consistent; Monitoring method was verified by site visit, checking calibration certificates, all monitoring method meets the description in the PD; Calibration was verified by checking calibration certificate and Accreditation certificate, all calibration of monitoring equipment meets the requirement indicated in the PD.

Data / Parameter:	$EG_{grid\ to\ PJ,\ y}$
Data unit:	MWh
Description:	Quantity of electricity imported from the grid by the Project in year y
Purpose of the data:	Calculation of baseline emissions
Parameter value:	<table><tr><td>01-12-2018~31-12-2018</td><td>22.80</td></tr><tr><td>2019</td><td>454.73</td></tr><tr><td>2020</td><td>423.29</td></tr><tr><td>01-01-2021~31-03-2021</td><td>125.65</td></tr></table>
Source of data used:	For Quantity of electricity imported from the grid by the Project in year y ($EG_{grid\ to\ PJ,\ y}$) are all sourced from Meter Reading Records (MRRs) /10/ issued by the project owner, Sales Receipts /11/ issued by power grid company covering monitoring period. The conservative data between MRRs and Sales Receipts will be used to calculate the emission reductions.
Information flow:	2 bidirectional electricity meters (main meter M1 and backup meter M2) installed at the output of the on site booster station and meter M3 installed at 10kV backup line were measured continuously, recorded monthly and archived

<table>
<tr><td></td><td>electronically.

Main meter M1 and backup meter M2 are installed at project side which are the monitoring meters belongs to the project owner. However, as per the agreement between local gird company and project owner, a billing meter (belong to local grid company and not available by the project owner) installed at the substation of grid side was used to measure quantity of electricity imported from the grid by the Project and is the basis of issuing sales receipts by local grid company. At 24:00 hr of last day of each month, the staff from project developer read the meter reading of main meter M1 and form Monthly Reading Records (MRRs), the grid company read the meter reading of bill meter and then transcribes the data into Sales Receipts.

For quantity of electricity imported from the grid by the Project measured by M3 installed in 10kV backup line. At 24:00 hr of last day of each month, the staff from project developer and the grid company will read M3 together. The project owner record reading of meter M3 and form Monthly Reading Records (MRRs). The staff from power grid company record reading of meter M3 and then transcribes the data into Sales Receipts.

The data for MRRs and Sales Receipts have been sent to the CDM consulting company for reporting of GHG emission reduction. The conservative one would be used for ER calculation.</td></tr>
<tr><td>Monitoring method, frequency and equipments:</td><td>The parameter was measured continuously and recorded monthly by 2 bi-direction electricity meters installed at the output of the on site booster station and one meter installed at 10kV backup line during the monitoring period verified by site visit.

See below for the information of electricity meters and verified by site visit and checking calibration certificates /12/:
<table>
<tr><th>Meter</th><th>Type</th><th>Serial Number</th><th>Accuracy</th></tr>
<tr><td>Main Meter (M1)</td><td>DSZ331</td><td>0001468380</td><td>0.2s</td></tr>
<tr><td>Backup Meter (M2)</td><td>DSZ331</td><td>0001468381</td><td>0.2s</td></tr>
<tr><td>10kV backup line Meter (M3)</td><td>DSZ535</td><td>0001350093</td><td>0.5s</td></tr>
</table>
The type, serial number and accuracy have been confirmed by site visit.</td></tr>
<tr><td>Calibration:</td><td>The calibration information is shown as below /12/:
<table>
<tr><th>Meter</th><th>Calibration date</th><th>Valid until</th></tr>
<tr><td rowspan="3">Main Meter (M1)</td><td>01-12-2018</td><td>30-11-2019</td></tr>
<tr><td>01-12-2019</td><td>30-11-2020</td></tr>
<tr><td>01-12-2020</td><td>30-11-2021</td></tr>
<tr><td rowspan="2">Backup Meter (M2)</td><td>01-12-2018</td><td>30-11-2019</td></tr>
<tr><td>01-12-2019</td><td>30-11-2020</td></tr>
</table></td></tr>
</table>

	<table><tr><td></td><td>01-12-2020</td><td>30-11-2021</td></tr><tr><td rowspan="3">10kV backup line Meter (M3)</td><td>01-12-2018</td><td>30-11-2019</td></tr><tr><td>01-12-2019</td><td>30-11-2020</td></tr><tr><td>01-12-2020</td><td>30-11-2021</td></tr></table> The calibration was conducted by accredited third parties which is Ningxia Electricity Measurement and Testing Center was accredited by Ningxia Quality and Technical Supervision Bureau valid from 21/06/2016 to 20/06/2021 /13/.
QA/QC procedure:	Data record will be archived for a period of 2 years after the crediting period to which the records pertain.
Means of verification:	Data of the parameter was verified by checking MRRs and Sales Receipts. All data is in line with MRRs and Sales Receipts; Information flow was verified by checking MRRs and Sales Receipts, and all information are consistent; Monitoring method was verified by site visit, checking calibration certificates, all monitoring method meets the description in the PD; Calibration was verified by checking calibration certificate and Accreditation certificate, all calibration of monitoring equipment meets the requirement indicated in the PD.

Parameters available at validation stage:

The parameters determine $EF_{grid,CM,y}$, including Power Generation, EG_y, $FC_{i,y}$, $EF_{CO2,i,y}$, Best electricity supply efficiency of thermal power, $NCV_{i,y}$ are monitored ex-ante in the VCS PD. In this monitoring report, parameter $EF_{grid,CM,y}$ is determined ex-ante by China DNA based on these parameters, which is comply with the VCS PD. Below data has been verified against the data sources and the PD.

Parameter title	Description	Data	Source
$EF_{grid,CM,y}$	Baseline emission factor of NWPG in the monitoring period.	0.89635	Notification on 2011 baseline emission factors for regional power grids in China, issued by China on 20/10/2011 /14/.

4.5 Quality of Evidence to Determine GHG Emission Reductions and Removals

The monitoring has been carried out in accordance with the monitoring plan contained in the registered PD /3/ version 02 dated 09/10/2013.

As a result of verification of the ER calculation process, the assessment team confirmed that all the parameters required for the determination of the emission reductions have been included in the MR Report and ER Calculation Spreadsheet /2/ and are consistent with the applied methodology ACM0002 version 13.0.0 and the monitoring plan contained in the registered PD. The parameters are complete in this monitoring period.

After verifying the reported figures with the raw data sources, it's confirmed that the values of the parameters from the raw data sources are consistent with those quoted in the ER Calculation Spreadsheet and the MR Report. The verification process for the same has been clearly described above in section 4.4 of the report.

The reported emission reductions in this monitoring period are 4.47% less than the expected, which is considered to be in the reasonable variation range. The detailed calculation process has been included in the MR and ER calculation spreadsheet and confirmed by the assessment team to be correct.

4.6 Non-Permanence Risk Analysis

Not applicable as a renewable project.

5 VERIFICATION CONCLUSION

Applus+ Certification has been commissioned by Climate Bridge (Shanghai) Ltd. to perform the verification of greenhouse gas emission reductions of the project activity "Ningxia Angli Lingwu Photovoltaic Grid Connected Power Plant Project" (VCS Ref. No. 1143).

The management of Datang Angli (Lingwu) New Energy Co., Ltd. is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project's Monitoring Plan in the registered PD /3/, version 02 dated 09/10/2013.

Our verification approach was based on the requirements as defined under the applicable VCS standards and relevant UNFCCC requirements. Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. The verification can confirm that:

- the project is implemented and operated as per the registered PD;

- the monitoring plan in registered PD is as per the applied methodology;

- the monitoring complies with the monitoring plan in the registered PD;

- the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS and CDM requirements;

- the installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately;

- the monitoring system is in place and generates GHG emission reductions data;

- the GHG emission reductions are calculated without material misstatements.

In our opinion, the GHG emission reductions for "Ningxia Angli Lingwu Photovoltaic Grid Connected Power Plant Project" during the monitoring period 01/12/2018 to 31/03/2021 as reported in Monitoring Report, prepared on the basis of the project's Monitoring Plan are fairly stated. Based on the information we have seen and evaluated, we confirm the following statement:

Verification period: From 01/12/2018 to 31/03/2021 (divided into 4 vintage periods). Verified GHG emission reductions or removals in the above reporting period:

Year	Baseline emissions or removals (tCO_2e)	Project emissions or removals (tCO_2e)	Leakage emissions (tCO_2e)	Net GHG emission reductions or removals (tCO_2e)
01/12/2018~31/12/2018	2,898	0	0	2,898
2019	45,375	0	0	45,375
2020	48,924	0	0	48,924
01/01/2021~31/03/2021	10,732	0	0	10,732
Total	107,929	0	0	107,929

APPENDIX 1: REFERENCE LIST

1 Monitoring report, version 01 dated 30/05/2021; Version 1.1, dated 16/06/2021

2 ER calculation spreadsheet, version 01 dated 30/05/2021; Version 1.1, dated 16/06/2021

3 Registered PD, version 02 dated 16/10/2013

4 VCS Validation and Verification Report, version 2.0 dated 16/10/2013, completed by China Quality Certification Center (CQC)

5 VCS Standard version 4.1, dated on 19/09/2019

6 Statement issued by project owner

7 Approved methodology ACM0002, version 13.0.0, dated 11/05/2012

8 CDM Monitoring procedure

9 Nameplate of the equipment

10 Meter Reading Record (MRRs) for electricity meters

11 Electricity sales receipts covering the monitoring period

12 Calibration certificates of meters covering the whole monitoring period issued by Ningxia Electricity Measurement and Testing Center

13 Accreditation certificates for Ningxia Electricity Measurement and Testing Center issued by Ningxia Quality and Technical Supervision Bureau

14 Notification on 2011 baseline emission factors for regional power grids in China, issued by China on 20/10/2011

15 Registered CDM PDD, version 02 dated 16/10/2013

16 Validation Report of registered CDM PDD, version 01 dated 05/11/2012

17 CDM PDD for renewal of crediting period, version 04 dated 30/06/2019

18 Validation Report of renewed CDM PDD, version 02 dated 10/07/2019