



VCS VERIFICATION REPORT

CECIC HKC GANSU CHANGMA WIND
POWER PROJECT

(VCS PROJECT ID:717)



Document Prepared By CTI Certification Co., Ltd.

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Project title	CECIC HKC Gansu Changma Wind Power project
Project ID	717
Verification period	01-Jan-2022 to 30-April-2023
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Client	China Energy Conservation Investment Corporation (CECIC)
Prepared by	CTI Certification Co., Ltd
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Work carried out by	Team Leader& Verifier: Zhang Lei Team Member: Kang Yaqi Technical Reviewer: Feng Tian

Summary:

CTI Certification Co., Ltd (CTI) has performed the verification of the emission reductions reported for the project activity “CECIC HKC Gansu Changma Wind Power project” (VCS Project ID:717) for the monitoring period 01-Jan-2022 to 30-April-2023, to review and determine the monitored reductions in GHG emissions that have occurred as a result of the project activity. These emission reductions are claimed as Verified Carbon Units (VCU) under the VCS Standard, version 4.7.

The verification was performed on the basis of VCS Standard, version 4.7 for the VCS projects, as well as criteria given to provide for consistent project operations, monitoring and reporting. The verification was conducted by means of document review, follow-up interviews and site inspections, and the resolution of outstanding issues. The verification team identified 1 CL and 2 CARs, and no FAR is raised in this monitoring period.

In CTI's opinion, the GHG emission reductions reported for the project in the monitoring report (version 03 dated 10-Dec-24) are fairly stated. The GHG emission reductions of the period from 01-Jan-2022 to 30-April-2023 were calculated correctly on the basis of approved methodology ACM0002 “Consolidated methodology for grid-connected electricity generation from renewable sources” (version 20.0) and the renewed VCS PD for the second VCS crediting period.

CTI does not assume any responsibility towards the issuance and utilization of the VCUs hereby verified and certified. Request for issuance of VCUs shall be made by the project proponent to an approved VCS Program Registry based on the requirements set out under the most recent version of the VCS Program Guidelines clause on VCS Registration.

The verification of reported emission reductions is based on the information made available to CTI and the engagement conditions detailed in this report. CTI cannot be held liable by any party for decisions made or not made based on this report.

Hence, CTI is able to certify that the emission reductions from the “CECIC HKC Gansu Changma Wind Power project” during this monitoring period from 01-Jan-2022 to 30-April-2023 amount to 439,912 tCO₂e.

CONTENTS

1	INTRODUCTION	6
1.1	Objective.....	6
1.2	Scope and Criteria	6
1.3	Level of Assurance.....	7
1.4	Summary Description of the Project	7
2	VERIFICATION PROCESS	8
2.1	Method and Criteria.....	8
2.2	Document Review	8
2.3	Interviews.....	9
2.4	Site Visits.....	10
2.5	Resolution of Findings	12
2.6	Eligibility for Validation Activities	12
3	VALIDATION FINDINGS	13
3.1	Methodology Deviations.....	13
3.2	Project Description Deviations.....	13
3.3	New Project Activity Instances in Grouped Projects.....	15
3.4	Baseline Reassessment	15
4	VERIFICATION FINDINGS.....	15
4.1	Project Details	15
4.2	Safeguards and Stakeholder Engagement	18
4.3	Accuracy of Reduction and Removal Calculations.....	31
4.4	Quality of Evidence to Determine Reductions and Removals.....	39
4.5	Non-Permanence Risk Analysis.....	40
5	VERIFICATION OPINION.....	40
5.1	Verification Summary	40
5.2	Verification Conclusion	41
5.3	Ex-ante vs Ex-post ERR Comparaison.....	41
	APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION	43
	APPENDIX 2: < ABBREVIATIONS >.....	44

APPENDIX 3: < REFERENCES >	45
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1 INTRODUCTION

China Energy Conservation Investment Corporation (CECIC) has commissioned CTI Certification Co., Ltd (CTI) to carry out the verification and certification of emission reductions reported for the “CECIC HKC Gansu Changma Wind Power project” (the project) for the period 01-Jan-2022 to 30-April-2023. This report contains the findings from the verification and includes a verification statement for the verified carbon units.

1.1 Objective

Verification is the periodic independent review and ex-post determination by an accredited verification body of the monitored reductions in GHG emissions that have occurred as a result of the registered VCS project activity during a defined verification period.

A verification statement is the written assurance by a verification body that, during a specific period in time, a project activity achieved the emission reductions as verified.

The objective of this verification was to verify and provide a verification statement of emission reductions reported for the “CECIC HKC Gansu Changma Wind Power project” for the period 01-Jan-2022 to 30-April-2023.

1.2 Scope and Criteria

The scope of the verification is:

- To verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan;
- To evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emissions reduction data is free from material misstatement;
- To verify that reported GHG emissions data is sufficiently supported by evidence.

The criteria of the verification are:

- VCS Program Guide, version 4.4/33/
- VCS Standard, version 4.7/32/ and other relevant requirements defined by Verra;
- The approved methodology ACM0002 (version 20.0)/36/applied by the project.

The verification shall ensure that reported emission reductions are complete and accurate in order to be verified.

1.3 Level of Assurance

The verification report expresses a conclusion with a reasonable level of assurance about whether the reported GHG emissions reduction data is free from material misstatement. CTI applied a materiality threshold of 1% (for large projects with ER larger than 300,000 tCO₂e per year) with respect to emission or misstatements concerning reported quantities as per VCS standard (i.e. 4.1.10 (4) of VCS Standard, version 4.7.)

1.4 Summary Description of the Project

Sectoral Scope and Project Type

According to the VCS Program Guide, version 4.4/33/and Annex A of the Kyoto Protocol, the project is applicable under the following activity categories:

- Sectoral Scope: 1. Energy (Renewable/non-renewable)
- Project Type: wind power project

Project Background

Project title:	CECIC HKC Gansu Changma Wind Power project
Project proponent:	CECIC HKC Gansu Wind Power Co., LTD.
Project location:	7-10 km southwest of Yumen Town, Yumen City, Gansu Province, People's Republic of China
Project VCS ID:	717
Applied methodology:	ACM0002 Consolidated methodology for grid-connected electricity generation from renewable sources (version 20.0)
VCS crediting period:	21/11/2009 to 20/11/2019 (the first VCS crediting period)
	21/11/2019 to 20/11/2029 (the second VCS crediting period)
VCU verification period:	01-Jan-2022 to 30-April-2023
Project details:	The Project involves the installation of 134 wind turbines with 1.5MW capacity per unit, with a total installed capacity of 201MW, and is expected to generate 431,949 MWh of clean electricity annually. This generated electricity will partially displace electricity currently generated from grid connected conventional fossil fuel based thermal power plants, while reducing emissions of 336,628 tCO ₂ e annually.

2 VERIFICATION PROCESS

2.1 Method and Criteria

The verification was performed through means of the following three phases in accordance with the requirement of renewed VCS PD, the applied methodology, and the VCS Standard, version 4.7 and other relevant VCS requirements:

- A desk review of the monitoring report and all support documents;
- Follow-up interviews with project stakeholders and site inspection;
- The resolution of outstanding issues and the issuance of the verification report and statement.

The following sections outline each step in more detail.

The verification of the emission reductions has assessed all factors and issues that constitute the basis for emission reductions from the project. These include:

- The emission reduction calculations and the relevant data records;
- The calibration and maintenance records for the monitoring instruments;
- The management systems to support the project operation and monitoring.

2.2 Document Review

Based on the requirements of competency, experience and qualified sectoral scopes, CTI appointed a verification team in accordance with CTI's internal procedures.

Function	Name	Technical competence	Task Performance*
Team Leader& Verifier	Zhang Lei	1.1, 1.2, 3.1, 4.1, 13.1, 13.2	☒ DR ☒ SV ☒ RP ☐ TR
Team Member	Kang Yaqi	1.2	☒ DR ☒ SV ☒ RP ☐ TR
Technical Reviewer	Feng Tian	1.2, 8.1, 13.1, 13.2	☒ DR ☐ SV ☐ RP ☒ TR

*DR=Document review; SV=Site visit; RP=Reporting; TR=Technical review

In addition to the VER/VCU monitoring report/1/, revised CDM PDD (approved by CDM EB) (Version 3.2 dated 20/08/2012), registered VCS PD (Version 01 dated 20/10/2011), renewed VCS PD (Version 2.0 dated 20/01/2021)/9/, emission reduction calculation spreadsheet/2/during this monitoring period, the following documents also were assessed as a part of the verification audit:

- Validation Opinion on changes in PDD (revised CDM PDD approved by CDM EB) /10/;
- Validation Report of registered CDM PDD /10/;
- Validation Report of renewed VCS PD /10/;
- VCS Monitoring Report of previous monitoring period /11/
- VCS Verification Report of previous monitoring period /12/

- Baseline and monitoring methodology ACM0002 applied by the project/36/;
- Relevant decisions, clarifications and guidance from the Verra/32/-/35/; and
- Other information and references relevant to the project activity.

During the desk review, CTI has applied standard auditing techniques to assess the quality of information provided. The following activities were performed:

- A review of the data and information presented to verify their completeness;
- A review of the monitoring plan and monitoring methodology, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures; and
- An 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.

2.3 Interviews

The objective of the interview process was to solicit important information from personnel related to project and relevant to the verification process. Onsite interviews and information discussions were conducted with project proponent, project owner and workers of CECIC HKC Gansu Wind Power Co., LTD. local officer from government, local residents and Project VCS development consultant. The interviews were performed by the assessment team on-site within the project area in 7-10 km southwest of Yumen Town, Yumen City, Gansu Province, People's Republic of China and the following is a list of the main interviewees and subject.

The key personnel interviewed are summarized in the table below:

Interviewed personnel	Role	Organization	Date	Subject	Team Member
Ms. Wei Wei	Deputy Manager	CECIC HKC Gansu Wind Power Co., LTD	29/03/2024	Project design and operation of the project activity; Status of the project (including PPs); Project proponent and ownership; Applicability of selected methodology; Applicable laws, statutes and other regulatory frameworks and any change; Baseline of the project; Emission factors of the project; Monitoring plan; Stakeholder consultation process and its outcomes; Sustainable development contributions.	Zhang Lei Kang Yaqi
Mr. Tang Guoqiang	Staff				
Mr. Fu Yongxiang	Staff				
Mr. Wang Wanting	Staff				

Mr. Tang Guoqiang	Staff				
Ms.Li Haiyan	Chairman	Local Women's Federation		Approval procedure; Applicable local laws and regulations on manure management projects; Other similar projects in the region; Sustainable development.	
Ms.Chen Yuxia	Director	Convenience Service Center			
Ms.Zhu Jianhui	Mayor	Xiaxihao Town		EIA Approval; Environment Impact; Sustainable Development; Environment monitoring; Applicable local laws and regulations on manure management projects	
Mr.Jia Hairui	Local resident	Xiaxihao Town		The process and participation of the stakeholder consultation; The impact of the project activity; The complaint by local stakeholders and the implementation of the mitigation measures.	
Mr.Liang Long		Huahai Town			
Mr.Li Jinshui		Liuhe Town			
Mr.Cui Jinlong		Changma Town			
Mr.Zhang Jichao		Huahai Town			
Mr.Ren Cuixu		Chijin Town			
Mr.Li Tao	Project Manager	Smart Carbon		Data collection and ER calculation.	
Mr. Zhou Jianrong	Project Manager	Environment & Energy Limited		Data collection and ER calculation.	

2.4 Site Visits

On 29/03/2024, CTI Validation Team visited CECIC HKC Gansu Wind Power Co., LTD. and performed the on-site verification at the project location. The interviewed personnel and objective are listed in above table.

During the site inspection, the project was inspected and documents evidence were checked, details as following table,

Duration of on-site inspection: 29/03/2024				
No.	Activity performed on-site	Site location	Date	Team member
1.	Opening meeting Interview with PP Representative, local officers, local residents and Operation Staff	Project Owner's office	29/03/2024	Zhang Lei Kang Yaqi
2	On-site inspection	Project sites		
3	Documents check	Project Owner's office		
4	Finding Summary	Project Owner's office		
5	Close Meeting	Project Owner's office		

The verification team performed the on-site verification (7-10 km southwest of Yumen Town, Yumen City, Gansu Province in the People's Republic of China) on 29/03/2024. The interviewed personnel and objective are listed in above table. During the on-site assessment, CTI has applied standard auditing techniques to assess the quality of information provided. The following aspects of the project activity have been verified:

- An assessment of the implementation and operation of the registered project activity is as per the registered VCS PD of the project activity;
- A review of information flows for generating, recording, aggregating and reporting the monitoring parameters; and
- Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan;
- A cross-check between information provided in the monitoring report and data from other sources such as plant logbooks and the electricity receipts;
- A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the registered VCS PD, the approved revised monitoring plan and the selected methodology;
- A review of calculations and assumptions made in determining the GHG data and emission reductions; and
- An identification that quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.

The data presented in the monitoring report were assessed by review of the detailed project documentation and production records, as well as by interviews with personnel from the project developer CECIC HKC Gansu Wind Power Co., LTD. and observation of collection of measurements, observation of established monitoring and reporting practices and assessment of the reliability of monitoring equipment. This has enabled the verification team to assess the accuracy and completeness

of reported monitoring results, to verify the correct application of the approved monitoring methodology and the determination of the emission reductions.

In addition, all parameters required by the monitoring methodology ACM0002 (version 20.0), and the management system were assessed during the site visit.

2.5 Resolution of Findings

A corrective action request (CAR) shall be raised, where:

- i. Non-conformities with the monitoring plan or methodology are found in monitoring and reporting, or if the evidence provided to prove conformity is insufficient;
- ii. Mistakes have been made in applying assumptions, data or calculations of emission reductions which will impair the estimate of emission reductions;
- iii. Issues identified in a FAR during validation to be verified during verification have not been resolved by the project proponents.

A clarification request (CL) shall be raised if information is insufficient or not clear enough to determine whether the applicable VCS requirements have been met.

The verification team identified 1 CL and 2 CARs in this monitoring period. The CL and CARs were satisfactorily addressed by the project proponents in the updated monitoring report version 03 dated 10-Dec-24 (refer to Appendix 4 for further details).

2.5.1 Forward Action Requests

A forward action request (FAR) is issued for actions if the monitoring and reporting require attention and/or adjustment for the next monitoring period.

CTI confirmed that there was no FAR identified in previous verification/12/, and no FAR was raised during this verification.

2.6 Eligibility for Validation Activities

Through checking the information from UNFCCC website and Verra registry, CTI confirmed the following:

The registered CDM PDD was validated by TÜV Rheinland Japan Ltd. on 31/05/2011. /10/

The revised CDM PDD (approved by CDM EB) of the project activity was validated by SGS United Kingdom Limited on 30/08/2012. /10/

The renewed VCS PD was validated by LGAI Technological Center, S.A. (Applus+Certification) on 20/01/2021. /10/

The initial VCS verification was carried out by LGAI Technological Center, S.A. under Voluntary Carbon Standard version 3 on 02/11/2011. /12/

5 periodic verifications have been carried out by SGS United Kingdom Limited on 23/08/2012, 28/11/2012 and 28/11/2013, and by CTI on 15/04/2015 and 04/03/2016 under CDM scheme. /12/

The 2nd to 4th VCS verification was carried out by LGAI Technological Center, S.A. (Applus+ Certification) under VCS version 4 on 06/10/2018, 22/01/2020 and 08/03/2021 respectively. /12/

The previous (5th) VCS verification was carried out by CTI Certification Co., Ltd under VCS version 4.3 on 18/11/2022. /12/

The proposed VCS monitoring period 01-Jan-2022 to 30-April-2023 is 6th VCS verification, CTI just undertook verification activities for the project according to the VCS Program Guide. This section is thus not applicable.

Furthermore, CTI conducted verification less than six consecutive years and thereby is in compliance with para 4.1.27 of VCS Standard, version 4.7, which stated that “A validation/verification body may not verify more than six consecutive years of a project’s GHG emission reductions or removals. The validation/verification body may undertake further verification for the project only when at least three years of the project’s GHG emission reductions or removals have been verified by a different validation/verification body”.

3 VALIDATION FINDINGS

The registered CDM PDD of the project activity was validated by TÜV Rheinland Japan Ltd. on 31/05/2011 /10/. The revised CDM PDD of the project activity was validated by SGS United Kingdom Limited on 30/08/2012 under CDM scheme /10/. The renewed VCS PD was validated by LGAI Technological Center, S.A. (Applus+ Certification) on 20/01/2021 under VCS version 4. CTI only performed verification activities on the proposed monitoring period for the project according to the VCS Program Guide.

3.1 Methodology Deviations

The validation process /10/ has assessed all factors and issues that constitute the basis for emission reductions from the project according to the applicable CDM methodology ACM0002 (Version 20.0) /36/. There was not any methodology deviation applied to this project. Details refer to section 4.1

3.2 Project Description Deviations

There is a project description deviation in relation with type of wind turbines and electricity metering system of the project activity. By checking the revised CDM PDD approved by CDM EB, it was identified that:

1. In the registered CDM PDD, the type of wind turbine is FD77/1500 while in the revised CDM PDD, the same has been revised to FD77A/1500.

2. In the registered CDM PDD, the project boundary involves electricity meter M1 and M2 and the electricity was delivered to the grid via one 35kV/110kV transformer, while in the revised CDM PDD, the project boundary involves 4 electricity meters Ma1, Ma2, Mb1 and Mb2 and the electricity was delivered to the grid via two 35kV/110kV transformers. Please refer to figure 1 and 2 below for detail.

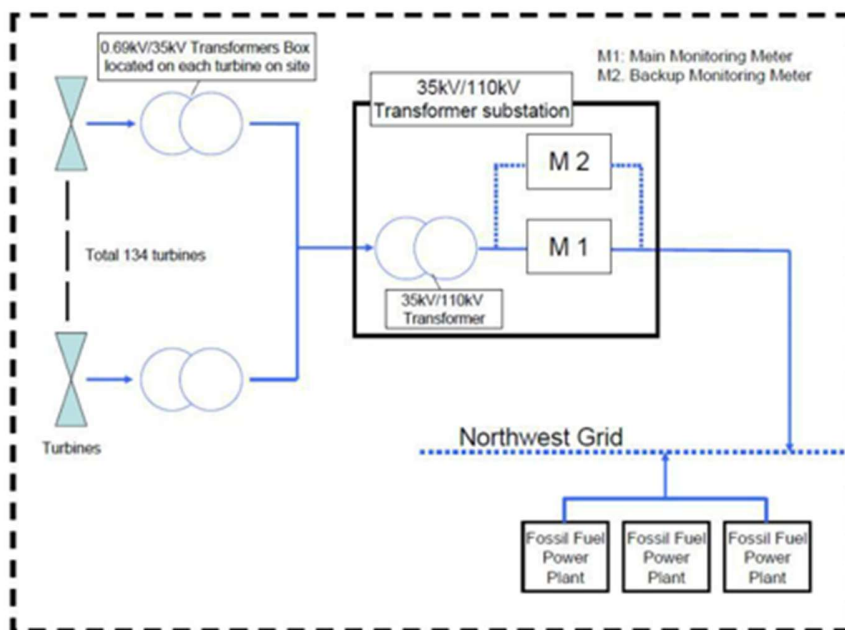


Figure 1- Project boundary of the registered CDM PDD⁴

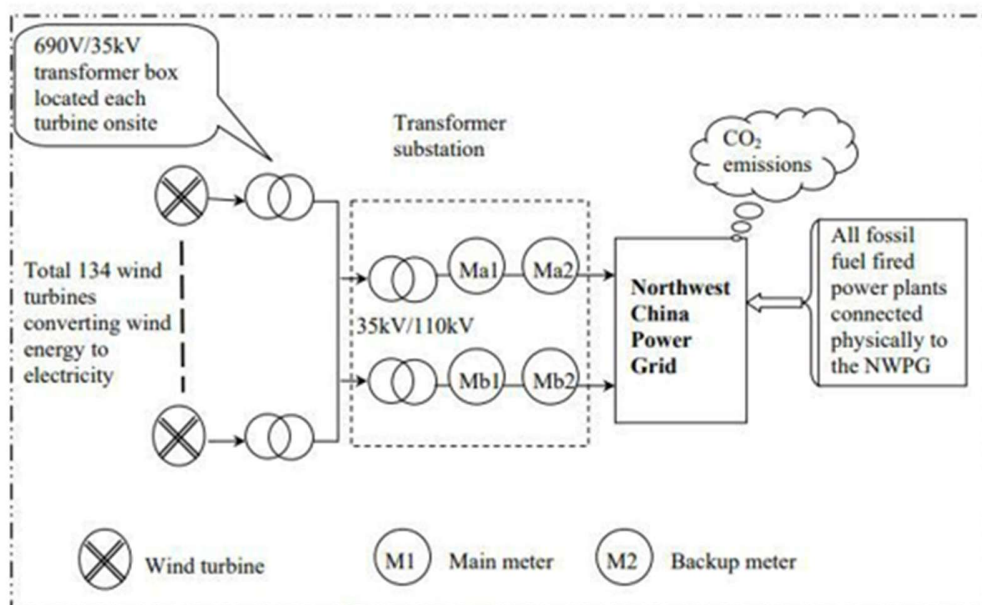


Figure 2- Project boundary of the revised CDM PDD⁴

The verification team confirmed that this deviation will not lower the accuracy and conservativeness of the monitoring system and the project remains in compliance with VCS Program rules and this deviation

has no impact on the applicability of the methodology, additionality or the appropriateness of the baseline scenario and meet all appropriate rules and requirements of VCS standard. Besides, the revised CDM PDD has been approved by CDM EB on 27/11/2012.

By checking renewed VCS PD /9/ and monitoring report (version 03 dated 10-Dec-24)/1/, it is confirmed that the deviation is applicable to this crediting period and also this monitoring period

3.3 New Project Activity Instances in Grouped Projects

The project was not a grouped project; hence this clause is not applicable.

3.4 Baseline Reassessment

Not applicable as the project is a non-AFOLU project.

4 VERIFICATION FINDINGS

This section summarizes the findings from the verification of the emission reductions reported for the “CECIC HKC Gansu Changma Wind Power project” for the monitoring period 01-Jan-2022 to 30-April-2023.

4.1 Project Details

Item	Evidence gathering activities, evidence checked, and assessment conclusion:
Audit history	Through checking relevant documents /9//10//11//12/ as well as CDM /18/and VCS registry, CTI concludes that the information provided in section 1.2 of MR /1/ is accurate and realistic..
Double counting and participation under other GHG programs	By checking UNFCCC website ¹ , it is confirmed by CTI that the project has been registered as CDM project activity on 24/09/2011 with reference No. 3670. GHG emission reductions of 1,670,691 tCO ₂ have been issued as CERs from 24/09/2011 to 31/12/2015 under CDM scheme. There are no CDM issuance during this monitoring period.

¹ <https://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1272607295.17/view>

	Furthermore, CTI checked public information from the GS. GCC, and VCS Registry/19/, and interviewed with project owner during site visit, it is confirmed that except CDM and VCS scheme, the project has not been participated or been rejected under any other GHG programs since validation or previous verification. Therefore, the verification team confirmed that the project only applies CERs and VCUs under CDM and VCS, and no rejection from CDM and VCS occurs, and the project is not registered nor seeking registration under any other GHG programs. Besides, PP has made the “Declaration of no double counting and not involved in other GHG scheme/28/”. Hence, it is confirmed that the emission reductions resulted from the project during this monitoring period are not likely to be double counted with other GHG programs.
No double claiming with emissions trading programs or binding emission limits	Based on VVB’s local expertise, China has a national emissions trading scheme only cover the high-emission industries, such as eight emission-intensive industries including heat generation, petrochemicals, chemicals, building materials, non-ferrous metals, papermaking, steel and aviation that emitted at least 26,000 tons of CO₂e/year which has been verified in the public website/21/, and it is confirmed that there is no emission cap enforced for the project owner by checking the enforced company list in public information. Therefore, it can be concluded that the PP will not be included in the China ETS. Hence, it is confirmed that the emission reductions will not be double counted with emissions trading programs or binding emission limits.
No double claiming with other forms of environmental credit	Via interview with the project developer/I1/ and REC Mechanism database of China, Chinese Emission Trading System/20/ as well as through checking the statement on double counting provided by project proponent/28/, it is confirmed that the project has not created any other form of environmental credit.
Supply chain (scope 3) emissions double claiming	CTI validation team confirms that the project involves the the installation of 134 wind turbines with 1.5MW capacity per unit, with a total installed capacity of 201MW, and is expected to deliver 431,949 MWh of clean electricity annually to the Northwest China Power Grid (NWPG). Hence, the project does not affect emissions associated with a good or service, nor it will affect the indirect upstream and downstream GHG emissions in supply chain.

Sustainable development contributions	By checking the renewed VCS PD (Version 2.0 dated 20/01/2021), China's National Plan on Implementation of the 2030 Agenda for Sustainable Development and 17 SDGs defined by UNDP, and interviewing with stakeholders during site visit, the verification team confirmed that the project would contribute to sustainable development in as below: - SDG 13: Reducing greenhouse gas emissions compared to a business-as-usual scenario. Through checking the daily operation record /6/, during this monitoring period, the emission reductions achieved were 439,912 tCO₂e. By checking UNFCCC website (https://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1272607295.17/view) and VERRA website, it is confirmed that since operation of the project activity, the cumulative emission reductions achieved were 5,269,777 tCO₂e. - SDG 7: Providing clean and renewable energy source and displacing the power generation of fossil fuel power plants, reducing pollution emissions caused by coal burning significantly, thus mitigating the air pollution and its adverse impacts on human health, promoting sustainable economic development in local area. The PP has chosen self-defined measure to tracking the contribution to SDG7 and has defined the project-level monitoring indicator: Quantity of renewable energy supplied to the power grid which is confirmed to be in line with the requirement of MR Template v4.4. During this monitoring period, the renewable energy supplied to the power grid was 564,508.851 MWh. By checking UNFCCC website (https://cdm.unfccc.int/Projects/DB/TUEV-RHEIN1272607295.17/view) and VERRA website, it is confirmed that since operation of the project activity, the cumulative renewable energy supplied to CSPG was 5,226,124.374 MWh. - SDG 8: Providing direct and indirect employment opportunities during construction and operation period, which promotes sustained, inclusive and sustainable economic growth, full and productive employment and decent work for local residents. The PP has chosen self-defined measure to tracking the contribution to SDG8 and has defined the project-level monitoring indicator: The number of long-term jobs by the implementation of the
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	project which is confirmed to be in line with the requirement of MR Template v4.4. By checking staff roaster listed in Appendix of the MR, it is confirmed that since operation of the project activity, 27 long-term working opportunities are provided.
Additional information relevant to the project	Through interviews with the project developer, CTI confirms that there is no commercially sensitive information has been excluded from the public version of the project description and there is no other relevant information that may have a bearing on the eligibility of the project, the reductions or removals, or the quantification of the project's reductions or removals.

4.2 Safeguards and Stakeholder Engagement

4.2.1 Stakeholder Identification

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Stakeholder identification	The stakeholders should be all the communities and parties which are relevant to the project activity or impacted by the project or have interest in the project. The MR states that the stakeholders were identified as individuals who will be directly or indirectly impacted due to the project activity. Direct stakeholders are those who deemed to either have a direct influence on the project or be directly influenced by the project, including but not limit to staff of the wind power project and local residents. Via checking the MR /1/ and other relevant documents and base on the on-site interview, the stakeholders are identified as 1. The staff of the wind power project, who are involved in the operation of the Project and the implementation of the Project provides them with job opportunities. Therefore, CTI confirmed the staff of the swine farm are identified as stakeholders by checking staff roaster listed in Appendix of the MR. 2. Local residents around Project site and the Project can provide them with new jobs and renewable energy. By checking the Labor contracts/23/, Pay rolls/22/, CTI confirmed that the project has create new job opportunities. By checking Power Purchase Agreement/3/, CTI confirmed that project has provide renewable

	energy to local residents, so CTI confirms that the local residents are identified as stakeholders. 3. Local governments, including the Development and Reform Commission, the Bureau of Ecology and Environment, and the Bureau of Agriculture and Rural Affairs, participate in the approval of Project construction and environmental management. Therefore, CTI confirmed local governments identified as stakeholders is reasonable by checking EIA approval/25/. . Approaches taken to validate the process of stakeholder identification and analysis as stepwise as following, 1.Checking the relevant docs and evidence Confirm completion of stakeholder identification by checking Project documents, Local Stakeholder Consultation Records/24/, EIA Report/25/, EIA approval/25/, Labor contracts/23/, Pay rolls/22/, which define the impact of the Project on the ecological environment of the Project site and the living environment of local villagers. 2.On-site inspection and interview Through site visits, VVB interviewed local villagers and local government stakeholder representatives, most of whom were involved in the implementation of the Project. Through the observation of the implementation of Project and interviews with community and government stakeholders, it was determined that the Project was implemented in areas affecting the community. The local government was responsible for the approval and related environmental and social issues. The Project provided job opportunities and related training for local residents. Therefore, it is verified that each stakeholder is correctly identified, relevant analysis and evaluation, and the relevance of the stakeholder to the Project activities in the MR is sufficient. The list of primary stakeholders is provided in the MR and seems reasonable for the project. This was confirmed during the on-site visit and the interview with the local stakeholders
Legal or customary tenure/access rights	Through on-site validation, CTI confirmed that the Project is located in Gobi desert areas. According to the Land Administration Law of the People's Republic of China/29/, the land is owned by the state as prescribed by law.

	By reviewing the Approval of land use and project construction/26/, CTI confirms that local Development and Reform Commission and Ecological Environment Bureau approved the land use and project construction on behalf of the local government. Project activities were verified without uncertainty or change in land tenure arrangements, resource rights, community-based property and customary rights, tenure or land ownership. Hence, based on above assessment, it is concluded that the project does not complicit of involuntary relocation as within the project area through checking the Proof of land qualification/26/ and onsite observations and interview with local residents
Stakeholder diversity and changes over time	Through interviews, CTI confirms the diversity of stakeholders: the staff of the project, the local residents around the project site, and the local government are affected by the project activity directly. Through interviews with Project managers, CTI confirmed that employees are mainly residents around the Project location, and their income levels may vary depending on their education and skill levels. Through interviews with the farmers where the Project is located, CTI confirmed that the farmers around the Project live in different villages and they have different social networks and ways of interacting. Through interviews with local governments, CTI confirmed that government departments are responsible for regulating and approving the operation of the project. Departments may come from different backgrounds with different expertise and experience, and different government departments may have different policies and regulations. Therefore, CTI has checked that it is reasonable to conclude that members of each group will adjust over time, but that their groups will not change much socially, economically, culturally, etc.
Expected changes in well-being	PP states that the implementation of the project will have a positive impact on the well-being and other characteristics of stakeholders. The Project will result in the following changes compared to the baseline scenario of electricity delivered to NWPG by the project that would otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources into the grid:

	Local people's well-being: By checking the Labor contracts/23/, Pay rolls/22/ as well as the staff roaster listed in Appendix of the MR, CTI confirmed that the construction and operation of the project provide employment opportunities for the local people, 27 persons have been employed by the project as long-term employee period.. Social welfare: By checking the labor contracts of Project employees/23/, CTI confirmed that the Project implementation will promote local economic development, provide employment opportunities and promote rural economic prosperity. Climate change impact: By checking the EIA/25/, Operation log of the project/6/,CTI confirmed that the Project generates electricity from renewable source to displace equal electricity generated from NWPG, which is dominated by fossil fuel fired power plants. . By checking the labor contracts of Project employees/23/, CTI confirmed that the Project has provided 27 long-term jobs for the local economy. By checking Operation log of the project/6/,CTI confirmed that the Project generates electricity from renewable source to displace equal electricity generated from NWPG and reducing the impact of greenhouse gases on climate. Collectively, these changes will have a positive impact on local people's livelihoods and living environment, while helping to improve ecosystem services and enhance the sustainability of local communities.
Location of stakeholders	This project is a wind power project, which is located in Gobi Desert areas, not towns or urban residential areas. It is expected to be affected by the project in the villages near the project. That is Yumen Town, Yumen City, Gansu Province, P. R. China. The project is geographically located in Gobi Desert areas, which is over 5km from the local people live area. The stakeholders in Yumen Town, Yumen City, Gansu Province, P. R. China can use the electricity generated by this renewable power plant and have chances to be employed by the project. Additionally, there are areas outside the project area that are predicted to be impacted by the project. These may include neighboring villages; the peoples live in the area can also use the electricity generated by this renewable power plant. The project has no negative impacts on these peoples.

	Via on-site inspection, CTI confirms that the identification of Location of stakeholders is reasonable and accurate.
Location of resources	Via on-site inspection, CTI confirmed that the location of territories and resources which stakeholders own or to which they have customary access are located in Yumen Town, Yumen City, Gansu Province, P. R. China.

4.2.2 Stakeholder Consultation and Ongoing Communication

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Ongoing consultation	Through on-site visits and interviews with stakeholders, CTI confirmed that PP has established a mechanism for continuous communication with local stakeholders. PP has published a contact phone number and placed a grievance book at the front desk administration of the PP where all stakeholders can record their grievances or comments at any time to ensure their voices are fully heard, which is also confirmed through checking the Grievance book/24/. Via interview with local stakeholders, CTI confirmed that PP regularly communicated with local stakeholders prior to Verification. The key timetable for the Project implementation was communicated to the local government, residents' committees and residents, and the Project promoters gathered their comments and suggestions, if any.
Date(s) of stakeholder consultation	As the stakeholder consultation is a long-term process, which is more than a specific meeting, the dates of consultation are determined as the monitoring period, i.e., 01-Jan-2022 to 30-April-2023, which is confirmed by CTI as appropriate and realistic.
Communication of monitored results	Through checking the methodology ACM0002 Consolidated methodology for grid-connected electricity generation from renewable sources (version 20.0)/35/, registered VCS PDD/9/, and the validation report of registered VCS PDD that completed by LGAI Technological Center, S.A. (Applus+ Certification) on 20/01/2021/10/, it is confirmed that the parameters need to be monitored are the electricity supplied to the grid and imported from grid. Though checking the VER/VCU monitoring report/1/, it is

	confirmed that the result is listed clearly in the report and the report will be published in the VCS website. In addition, a spreadsheet of the monitored result during the monitoring period is provided next to the Grievance book, which is confirmed through on-site interview with local stakeholders /11/ and project staff /13/. During the VVB meeting, the project staff has published once again the monitoring result. Through on-site interview with project proponent /13/, it is confirmed that if any comments and suggestions from stakeholders are received, project proponent will record and the handling results will be notified to stakeholders via phone or other contact information left by the stakeholders.
Consultation records	Through on-site visit and interviews with stakeholders and checking the Grievance book /24/ as well as the validation report of registered VCS PDD that completed by LGAI Technological Center, S.A. (Applus+ Certification) on 20/01/2021/10/, CTI confirmed that the project proponent has developed a mechanism to record the consultations, including grievance notebook and report documents. Yet, through on-site visit and interviews with stakeholders and checking the Grievance book /24/, it is confirmed that there is no comments and suggestions received in this monitoring period.
Stakeholder input	Through on-site visits and interviews with stakeholders and checking the Grievance book /24/, CTI confirmed that the project has not received any complaints, comments or suggestions from stakeholders during the consultation.

4.2.3 Free, Prior, and Informed Consent

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Consent	By checking the validation report of registered VCS PDD that completed by LGAI Technological Center, S.A. (Applus+ Certification) on 20/01/2021/10/, it is confirmed that prior to the construction on the start date, a stakeholder consultation meeting was held with 06/03/2008, including local residents, local government, project proponent, and consultant. During the stakeholder meeting, a one-page questionnaire, which was designed to be easily filled in, were distributed. 44 copies of questionnaire were distributed, and 44

	pieces of reply were received. The opinions expressed by the stakeholders were recorded and are available on request. The survey showed that the proposed project receives strong support from the local community. Such conclusion is also confirmed via on-site interview with local residents /11/. According to the report/10/, PP disclosed to stakeholders the nature, scale, speed, reversibility and scope of the proposed Project or activity; The reason or purpose of the Project and/or activity; Duration of Project activities; Affected locations; And a preliminary assessment of economic, social, cultural and environmental impacts, including potential risks and fair and equitable benefit sharing, respecting the precautionary principle. In addition, PP stated that it will actively listen to concerns and feedback from stakeholders and address any questions or concerns raised. Through this process, PP were able to reach a transparent agreement with the community on the implementation of project activities. In addition, as assessed above, by checking the grievance book /24/, it is confirmed that no negative comments were received. Via interviewing with staff from local environmental protection bureau 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, there were no negative comments or issues from the local stakeholders during this monitoring period, the project passed all the periodic spot checks by local government. In addition, PP have been monitoring the situation in the community to identify any ongoing or unresolved conflicts that may be affected by this project. PP take active steps to ensure that Project do not exacerbate or influence the outcome of these conflicts. It is verified that the Free Prior and Informed Consent is true and reasonable, such conclusion is supported by the on-site interview with local stakeholders.
Outcome of FPIC discussion	The project land is Gobi Desert area land, does not occupy the villagers' house land, permanent basic farmland, is not in the range of prohibited cultivation area, has obtained the approval from local Development and Reform Commission/26/ and Ecological Environment Bureau/25/. Therefore, the project does not involve land

	encroachment, non-consensual resettlement of residents and forced relocation. Prior to the commencement of the project, adequate communication was conducted with the local peoples, including the key project schedule, Project details, environmental protection, carbon development, risks, benefits, etc. have been disclosed and fully communicated in advance. All relevant arrangements are made with the free, prior and informed consent of stakeholders. All stakeholders expressed full support for the project. According to Local Stakeholder Consultation Process that validated in the validation report and on-site interview, CTI confirms that all stakeholders expressed full support for the project and all relevant arrangements are made with the free, prior and informed consent of stakeholders.
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4.2.4 Grievance Redress Procedure

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Grievance received and steps taken to resolve the grievance including the outcomes of the resolution	In order to resolve complaints relating to the Project, the Project has established a complaint resolution process with stakeholders to ensure fair, transparent and timely processing. Through interviews with Project managers and via checking Grievance book /24/, CTI confirmed that the steps PP has developed in collaboration with stakeholders to resolve grievances are fair and reasonable: 1. Receiving Complaints: Any complaints relating to the Project will be received and recorded. The Project owner has placed a comment book at the company's front desk and posted contacts and contact information for stakeholders to submit complaints in writing, verbally, or as a designated contact person. 2. Hearing: Upon receipt of a complaint, PP will schedule a hearing or meeting for stakeholders to express their views and concerns. This will provide an open platform to ensure that all relevant information is fully considered. 3. Response: Following the hearing or meeting, PP will provide a written response confirming that the stakeholder's complaint has been understood and documented, and explaining the action we will take. This will ensure transparency and continuity of communication.

	4. Complaint resolution: PP will use its best efforts to resolve the complaint within a reasonable time. This may include adopting appropriate conflict resolution methods such as mediation, negotiation or other appropriate solutions. PP will work with stakeholders to ensure they are satisfied with the solution. Through checking the checking Grievance book /24/, CTI confirmed project proponent does not received any complaints during the monitoring period.
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4.2.5 Public Comments

Comments received	Actions taken by the project proponent	Evidence gathering activities, evidence checked, and assessment conclusion
Via checking project's page on the Verra Registry, CTI confirmed this project has not received any complaints or comments during or outside the public comment period.	/	/

4.2.6 Risks to Local Stakeholders and the Environment

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Risks to stakeholder participation	No risk identified. Via checking the Approval of land use and project construction/26/, the project leased land conforms to the local environmental protection planning, is not in the forbidden zone, restricted zone, environmental red line planning area, and does not contain basic farmland, hence , CTI confirms that the project has no impact on food security, land loss, yield loss, livelihoods of the local population and climate change.
Working conditions	No risk identified. By checking Project monitoring manual and management procedure/4/, CTI confirmed the project has strictly implemented national and industry regulations and standards on labor safety and health, as well as Chinese labor law and local requirements. As confirmed by checking approved EIA/25/, CTI confirmed the project has undertaken the mitigation measures and carry out regular occupational

	health and safety testing every year to ensure the safety and healthy working environment. Project provide a safe and fair working environment. CTI confirms that the above risk identification is reasonable
Safety of women and girls	No risk identified. By checking Project Employee Management Manual/27/, CTI confirmed that in the design phase of the project, the safety of women was taken into account and corresponding preventive measures were taken. During the implementation of the project, verified by checking Technical Training Records/5/, all personnel involved in the project are regularly trained on gender sensitivity, including awareness of gender discrimination and gender-based violence, and how to prevent and respond to these issues. The project has established effective monitoring and reporting mechanisms as verified by checking Employee Management Manual and Complaint record/27/, CTI confirmed that women can report any safety issues or acts of gender discrimination, ensuring that their voices are adequately addressed and protected. CTI confirms that the above risk identification is reasonable.
Safety of minority and marginalized groups, including children	No risk identified. Through interviews with the project manager and staff regarding the recruitment policy of the project, as well as reviewing the Project Employee Management Manual/27/, CTI confirmed that the project will provide fair and open job opportunities without discrimination against marginalized groups. Additionally, efforts will be made to provide social support and assistance for local marginalized groups. The project does not employ child labor. Therefore, the Project poses no risk to marginalized groups, including children.
Pollutants (air, noise, discharges to water, generation of waste, release of hazardous materials)	The Project clearly defines the risks of waste water, waste gas, noise and harmful substances in the environmental impact assessment document, and strictly implements the environmental pollution control measures proposed in the EIA Report/25/during the implementation of the Project, thereby eliminating the risks of the Project in terms of waste water, solid waste gas, noise, air pollution and dust. CTI confirms that the above risk identification is reasonable, the implementation of the above measures has effectively avoided the risk or mitigated the possible impact and all pollutants are properly disposed of, and the treatment results meet the standards.

4.2.7 Respect for Human Rights and Equity

4.2.7.1 Labor and Work

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Discrimination and sexual harassment	By interviewing with project manager and staff about issuance of recruitment information, and examining the Project Employee Management Manual/27/, Labor contracts/23/, Pay rolls/22/, CTI confirms that the Project does not discriminate of any kind on the basis of sex, race, religion, sexual orientation, or any other ground. Respect the rights granted to women by the Constitution of the People's Republic of China, the Labor Law of the People's Republic of China and the Special Provisions on Labor Protection for Female Employees/29/. The Project established a complaint mechanism in Project Employee Management Manual/27/ for sexual harassment. By reviewing the complaint record/27/, CTI confirmed that no sexual harassment complaint had been received during the monitoring period.
Management experience	The Project management team has the experience and expertise to effectively implement similar Project activities. Via on-site interview with the project manager and examining the labor contract/23/, CTI confirmed that the main person responsible for the Project implementation has many years of work experience in the field of manure management and environmental protection and holds a doctorate degree, has the relevant skills and expertise in the planning, implementation and supervision of Project, and is able to effectively manage and drive the implementation of Project. Also, through on-site interview, CTI confirmed that project proponent has developed sufficient recruitment strategy to fill gaps in skills and experience that may exist.
Gender equity in labor and work	Through site visits and inspection of the labor contract/23/, CTI confirms that the Project has male and female employees of different genders and that there are female employees in management positions. It is verified by Pay Roll/22/ that there is no significant gender difference between female and male employees in terms of compensation, promotion opportunities and benefits, and that employees of different genders have equal access to training and development resources as confirmed by reviewing the Technical Training Records/5/. Through interviews with Project employee representatives, CTI confirmed that employees believe that Project is treated equally in terms of gender and pay.

Human trafficking, forced labor, and child labor	The Project adopts a compliant recruitment and employment policy, and by examining the labor contract/23/, CTI confirms that the employment policy of the Project complies with the relevant standards of the International Labor Organization /30/ and does not involve any form of human trafficking, forced labor and child labor. Through on-site interviews with Project managers, CTI confirmed that the Project has established oversight mechanisms in Project Employee Management Manual/27/ to ensure that all employees and partners involved in the Project are not involved in human trafficking, forced labor, and child labor. Via interviewing the project staff, CTI confirmed periodic inspections have conducted by project manager to ensure that there are no violations of Labour rights during the implementation of the Project and that inspections during the monitoring period have not revealed any violations of Labour rights.
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4.2.7.2 Human Rights

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Human rights	By interviewing Project managers as well as reviewing employee management manuals/27/ and Labor contracts/23/, CTI confirms that Project activities comply with International Human Rights Law, And strictly abide by the relevant laws of China, such as the Constitution of the People's Republic of China, the Labor Law of the People's Republic of China, the Law of the People's Republic of China on the Protection of Women's Rights and Interests, the Law of the People's Republic of China on the Protection of Minors, etc.) to ensure the protection of stakeholders.

4.2.7.3 Indigenous Peoples and Cultural Heritage

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Preservation and protection of cultural heritage	Through site visits and interviews with local government staff as well as reviewing the EIA and EIA approval/25/, CTI confirmed that there are no cultural heritage nor indigenous people to be protected in or around the project site.

4.2.7.4 Property Rights

Item	Evidence gathering activities, evidence checked, and assessment conclusion
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Disputes over rights to territories and resources	By checking the Approval of land use and project construction/26/, CTI confirms that the project got the approval from government about the land use, and the Project does not involve any possible conflict of rights between different stakeholders. CTI confirms that the territorial and property rights identified in this Project are clear and reasonable.
Respect for property rights	By checking the Approval of land use and project construction/26/, CTI confirms that the Project protects the territory, property and customary rights through the signing of lease contracts; As confirmed by the validation report of registered VCS PDD that completed by LGAI Technological Center, S.A. (Applus+ Certification) on 20/01/2021 /10/, the Project has also established a participatory consultation mechanism that includes stakeholders. and customary rights holders to ensure their participation in the Project management and decision-making process and to safeguard their property rights. CTI confirmed that these measures ensure effective respect and protection for property and customary rights of use.

4.2.7.5 Benefit Sharing

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Summary of the benefit sharing plan	As assessed above, through checking the Approval of land use and project construction/26/ and on-site investigation, CTI confirmed that there are no disputes over rights to territories and resources, the land, the facility, and the project are all belong to the project proponent. Though smallholders/community members have fully communicated through stakeholder consultation and ongoing communication mechanism as assessed above, they do not have the legal right to participate in defining the decision-making process and the distribution mechanism for benefit sharing. Hence, this section is not relevant to the project.
Benefit sharing during the monitoring period	N/A

4.2.8 Ecosystem Health

Item	Evidence gathering activities, evidence checked, and assessment conclusion
Impacts on biodiversity and ecosystems	No risk identified. Via checking Approval of EIA report /25/, and after on-site inspection and interviews with project manager and local residents, CTI confirms that not risk identified on biodiversity and ecosystems.
Soil degradation and soil erosion	No risk identified. Through checking the Approval of EIA report /25/, CTI confirmed that the project is a wind power project which would not cause soil degradation and soil erosion and the land occupied during construction and has been approved. No land will be used during operation, there was not risk identified on Soil degradation and soil erosion.
Water consumption and stress	No risk identified. CTI confirmed this project is a wind power project and does not use water resources, there was not risk identified on Water consumption and stress
Usage of fertilizers	No risk identified. CTI confirmed this project is a wind power project and does not use any fertilizers, there was not risk identified on Usage of fertilizers.

4.2.8.1 Rare, Threatened, and Endangered species

By checking the official websites of national and local environmental protection authorities/30/, EIA report and approval/25/ and via interviewing with local residents, local officials, CTI confirmed that the Project is not in or near the habitat of rare, threatened or endangered animals.

4.2.8.2 Introduction of Species

Not applicable. No planting or introduction of species is involved in the Project implementation.

4.2.8.3 Ecosystem conversion

Not applicable. The project is not an ARR, ALM, WRC or ACoGS project.

4.3 Accuracy of Reduction and Removal Calculations

The monitoring has been carried out in accordance with the renewed VCS PD (Version 2.0 dated 20/01/2021). CTI confirms that all parameters stated in the monitoring plan are monitored and reported appropriately. All parameters required to be monitored by the monitoring plan as per the monitoring

methodology ACM0002(version 20.0) and the management system were assessed during the site visit. The monitoring report lists each parameter required by the monitoring plan and the information flow (i.e. from data generation, aggregation, recording, calculation and reporting) for these parameters is provided. The information flow for each parameter is further verified in the following sections.

Parameters monitored

During the verification all relevant monitoring parameters have been verified with regard to the

- (i) appropriateness of the applied measurement / determination method,
- (ii) the correctness of the values applied for ER calculation,
- (iii) the accuracy, and applied QA/QC measures.

The monitoring results as well as the verification procedure are described parameter-wise as follow,

Quantity of net electricity generation supplied by the project plants/units to the grid in year y ($EG_{facility,y}$)

$EG_{facility,y}$ is calculated through equation below:

$$EG_{facility,y} = EG_{export,y} - EG_{import,y}$$

$EG_{export,y}$: Quantity of electricity exported to the grid by the Project.

$EG_{import,y}$: Quantity of electricity imported from the grid by the project

Quantity of electricity exported to the grid by the Project ($EG_{export,y}$)

This parameter was continuously measured by bi-directional electricity meters (main meter Ma1 and its backup meter Ma2) installed at high voltage side of 35kV/110kV substation. When main meter is not working, the reading of backup meters will be used. By checking operation log /6/, it is confirmed that main meter Ma1 and Mb1 is working well during this monitoring period.

The meter reading was recorded monthly and archived electronically. In this monitoring period, the cut-off time was 24:00 hr of last day of each month. At the cut-off time, the staff from project developer and the grid company read the electricity meters together. The project developer record electricity meter readings and form Monthly Reading Records (MRRs) /7/. The staff from power grid company record electricity meter readings, which is the basis for issuing Electricity Transaction Notes /8/ of the project activity.

$EG_{export,y}$ was sourced from Meter Reading Records (MRRs) /7/ issued by the project proponent, and Electricity Transaction Notes /8/ issued by power grid company covering monitoring period. The conservative data will be used for calculation of emission reductions.

Quantity of electricity imported from the grid by the project ($EG_{import,y}$)

This parameter was continuously measured by bi-directional electricity meters (main meter Ma1 and its backup meter Ma2) installed at high voltage side of 35kV/110kV substation. When main meter is not working, the reading of backup meters will be used. By checking operation log /6/, it is confirmed that

main meter Ma1 and Mb1 is working well during this monitoring period. The meter reading was recorded monthly and archived electronically. In this monitoring period, the cut- off time was 24:00 hr of last day of each month. At the cut-off time, the staff from project developer and the grid company read the electricity meters together.

The project developer record electricity meter readings and form Monthly Reading Records (MRRs) /7/. The staff from power grid company record electricity meter readings, which is the basis for issuing Electricity Transaction Notes /8/ of the project activity.

EG_{import,y} was sourced from Meter Reading Records (MRRs) /7/ issued by the project developer, and Electricity Transaction Notes /8/ issued by power grid company covering monitoring period. The conservative data will be used for calculation of emission reductions.

As described above, the meters have been installed in accordance with VCS Program rules and meet all appropriate rules and requirements of VCS standard. CTI has on-site checked the location of the meters against the diagram of power connection system and found them to be consistent.

Data in the monthly reading records were used to the report, through a cross check with Electricity Transaction Notes /8/. The conservative values were used for the monitoring report and ERs calculation spreadsheet, which has been verified by the verification team. Supporting references and data required to determine quantity of net electricity generation supplied by the project plant/unit to the grid during this monitoring period is found to be complete and transparent.

Monitoring equipment and calibration

The meters have been calibrated periodically as per the relevant industrial standard by the qualified third party to ensure the monitoring equipment's accuracy and in good conditions. The relevant information of meters' calibration is listed as below

NO.	Serial No.	Accuracy	Calibration frequency	Calibration date	Validity of the Calibration
Main meter Ma1	217504317	0.2s	Annually	29/03/2021	28/03/2022
				27/11/2021	26/11/2022
				18/09/2022	17/09/2023
				26/12/2022	25/12/2023
Backup meter Ma2	217504318	0.2s	Annually	29/03/2021	28/03/2022
				27/11/2021	26/11/2022
				18/09/2022	17/09/2023
				26/12/2022	25/12/2023
Main meter Mb1	217504315	0.2s	Annually	29/03/2021	28/03/2022
				27/11/2021	26/11/2022
				18/09/2022	17/09/2023
				26/12/2022	25/12/2023
Backup meter Mb2	217504316	0.2s	Annually	29/03/2021	28/03/2022

				27/11/2021	26/11/2022
				18/09/2022	17/09/2023
				26/12/2022	25/12/2023

Through on-site visit and interview with PP and by checking the meter replacement record/31/, it is confirmed that the main meter Ma1 (SN. 51000040) was replaced by the new meter Ma1 (SN. 217504317), the backup meter Ma2 (SN. 51000042) was replaced by the new Ma2 (SN. 217504318), the main meter Mb1 (SN. 51000044) was replaced by the new Mb1 (SN. 217504315) and the backup meter Mb2 (SN. 51000043) was replaced by the new Mb2 (SN. 217504316) at 24:00 on 31/12/2021 according to the agreement of the project owner and the grid company. CTI confirmed through on-site interviews with PP and by reviewing the qualification documents of State Grid Gansu Electric Power Company Metering Center /15/and the meter calibration reports/15/ as well as the meter replacement record /31/that the meter replacement was carried out with the consent by the grid company and the new meter's accuracy is 0.2S which is the same as the old meter and thus, still met the accuracy requirements of the monitoring plan and it does not negatively impact the preciseness of the measurement.

Main meter Ma1 and its backup meter Ma2 were calibrated by State Grid Gansu Electric Power Company Metering Center. Calibration records and accreditation certificates/15/ have been verified by the verification team. The accuracy of all meters is complied with that in the monitoring plan of renewed VCS PD (Version 2. dated 20/01/2021). By checking the industrial metering configuration standard "Technical Administrative Code of Electric Energy Metering (DL/T 448-2016)" /17/, CTI can confirm that the accuracy level of all meters meets the requirement stipulated in this standard. In conclusion, the verification team can confirm that the accuracy of the meters is in line with monitoring plan of the renewed VCS PD (Version 2.0 dated 20/01/2021) and relevant industry standard.

In the monitoring plan of renewed VCS PD (Version 2.0 dated 20/01/2021), it stated that the meters will be calibrated and checked annually for accuracy. By checking the calibration reports, the verification team found the calibration frequency of these meters is annual, which is in line with the calibrating standard "Technical Administrative Code of Electric Energy Metering (DL/T 448-2016)" /17/. Hence, the verification team can confirm that the meters' calibration frequency is in line with monitoring plan of the renewed VCS PD (Version 2.0 dated 20/01/2021) and relevant industry standard, and the calibrations of meters are verified to be valid for the whole reporting period.

Data management and control

CECIC HKC Gansu Wind Power Co., LTD. is responsible for operation and routine maintenance of power plant under the project activity. The quality assurance and quality control procedures have been addressed in the VER project management and monitoring manual /4/, including the organization structure with the responsibilities, personnel competencies, monitoring procedures and monitoring management. By interview with the staff and check records /4-/6/ during on-site visit, it can be confirmed that the monitoring management system is implemented following the project management and monitoring manual.

All monitoring devices have been calibrated and maintained periodically to ensure the accuracy of measurement. Calibration records of instruments used in measurements were made available during the verification visit and found to be valid for the entire period of the verification. Competence and training records of in-plant personnel engaged in measurement of plant parameters were presented during verification and found to be in order.

Emission reduction calculation

CTI confirms that appropriate methods and formulae for calculating baseline emissions, project emissions and leakage have been followed, and the assumptions, emission factors and default values that are applied in the calculation have been justified. According to the applied methodology, the emission reductions are determined as the difference between the baseline emissions, project emissions and leakage: $ER_y = BE_y - PE_y$.

Baseline emissions

Baseline reductions are determined as multiplying Quantity of net electricity generation supplied by the project plant/unit to the grid in year y ($EG_{facility,y}$) by the validated ex-ante fixed The combined margin CO₂ emission factor for grid connected power generation in year y ($EF_{grid,CM,y}$).

$$BE_y = EG_{facility,y} \times EF_{grid,CM,y}$$

The combined margin CO₂ emission factor for grid connected power generation in year y ($EF_{grid,CM,y}$) EF is the combined margin CO₂ emission factor for grid connected power generation in year y of the which has been verified ex-ante in the validation stage in the renewed VCS PD (Version 2.0 dated 20/01/2021) as 0.7793 tCO₂e/MWh for the crediting period. Quantity of net electricity generation supplied by the project plant/unit to the grid in year y ($EG_{facility,y}$)

$EG_{facility,y}$ is calculated by following formula:

$$EG_{facility,y} = EG_{export,y} - EG_{import,y}$$

Data in the Monthly Reading Records (MRRs) and Electricity Transaction Notes are used to calculate $EG_{facility,y}$ as follows:

Crosscheck of EG_{export,y}

Period	EG _{export,y} (MWh)				
	Data from meter Ma1 readings (MWh)	Data from meter Mb1 readings (MWh)	Total electricity exported (MWh)	Data on ETNs (MWh)	Data for ER calculation (MWh)
	A	B	C=A+B	D	E=Min(C,D)
01/01/2022-31/01/2022	9,704.640	9,699.360	19,404.000	19,609.234	19,404.000
01/02/2022-28/02/2022	14,596.560	14,607.120	29,203.680	29,206.716	29,203.680
01/03/2022-31/03/2022	21,196.560	21,193.920	42,390.480	42,388.606	42,388.606
01/04/2022-30/04/2022	19,063.440	19,031.760	38,095.200	38,092.850	38,092.850
01/05/2022-31/05/2022	24,852.960	24,808.080	49,661.040	49,665.608	49,661.040
01/06/2022-30/06/2022	16,280.880	16,220.160	32,501.040	32,498.638	32,498.638
01/07/2022-31/07/2022	15,084.960	15,021.600	30,106.560	30,103.208	30,103.208
01/08/2022-31/08/2022	18,081.360	18,039.120	36,120.480	36,121.219	36,120.480
01/09/2022-30/09/2022	11,539.440	11,470.800	23,010.240	23,014.570	23,010.240
01/10/2022-31/10/2022	14,987.280	14,934.480	29,921.760	29,920.096	29,920.096
01/11/2022-30/11/2022	19,121.520	19,137.360	38,258.880	38,258.828	38,258.828
01/12/2022-31/12/2022	21,698.160	21,748.320	43,446.480	43,444.869	43,444.869
2022 Subtotal	-	-	-	-	412,106.535
01/01/2023-31/01/2023	27,294.960	27,334.560	54,629.520	54,631.764	54,629.520

01/02/2023-28/02/2023	7,555.680	7,550.400	15,106.080	15,104.470	15,104.470
01/03/2023-31/03/2023	16,703.254	16,700.614	33,403.867	33,407.404	33,403.867
01/04/2023-30/04/2023	25,328.186	25,322.906	50,651.093	50,647.819	50,647.819
2023 Subtotal	-	-	-	-	153,785.676
Total	-	-	-	-	565,892.211

Crosscheck of EG_{import,y} and calculation of EG_{facility,y}

Period	EG _{import,y} (MWh)					EG _{facility,y} (MWh)
	Data from meter Ma1 readings (MWh)	Data from meter Mb1 readings (MWh)	Total electricity Imported (MWh)	Data on ETNs (MWh)	Data for ER calculation (MWh)	
	F	G	H=F+G	I	J=Max(H,I)	
01/01/2022-31/01/2022	66.000	73.920	139.920	145.200	145.200	19,258.800
01/02/2022-28/02/2022	31.680	36.960	68.640	71.280	71.280	29,132.400
01/03/2022-31/03/2022	34.320	39.600	73.920	68.640	73.920	42,314.686
01/04/2022-30/04/2022	15.840	26.400	42.240	42.240	42.240	38,050.610
01/05/2022-31/05/2022	15.840	21.120	36.960	34.320	36.960	49,624.080
01/06/2022-30/06/2022	18.480	26.400	44.880	42.240	44.880	32,453.758
01/07/2022-31/07/2022	26.400	39.600	66.000	66.000	66.000	30,037.208
01/08/2022-31/08/2022	29.040	42.240	71.280	71.280	71.280	36,049.200

01/09/2022-30/09/2022	26.400	39.600	66.000	66.000	66.000	22,944.240
01/10/2022-31/10/2022	55.440	84.480	139.920	134.640	139.920	29,780.176
01/11/2022-30/11/2022	47.520	58.080	105.600	105.600	105.600	38,153.228
01/12/2022-31/12/2022	84.480	89.760	174.240	168.960	174.240	43,270.629
2022 Subtotal	-	-	-	-	1,037.520	411,069.015
01/01/2023-31/01/2023	47.520	52.800	100.320	102.960	102.960	54,526.560
01/02/2023-28/02/2023	68.640	73.920	142.560	139.920	142.560	14,961.910
01/03/2023-31/03/2023	26.400	31.680	58.080	55.440	58.080	33,345.787
01/04/2023-30/04/2023	18.480	23.760	42.240	42.240	42.240	50,605.579
2023 Subtotal	-	-	-	-	345.840	153,439.836
Total	-	-	-	-	1,383.360	564,508.851

Based on the values of monitored parameters in the above table, the emission reductions are calculated as follows:

Monitoring Period	EG _{export,y} (MWh)	EG _{import,y} (MWh)	EG _{facility,y} (MWh)	EF _{grid,CM,y} (tCO ₂ /MWh)	BE _y (tCO _{2e})
01/01/2022-31/12/2022	412,106.535	1,037.520	411,069.015	0.7793	320,339
01/01/2023-30/04/2023	153,785.676	345.840	153,439.836		119,573
Total	565,892.211	1,383.360	564,508.851		439,912

Project emissions

As per renewed VCS PD and ACM0002, v20.0, for the wind power activities, the project emissions from the project are zero. Hence, PE_y during the monitoring period from CECIC HKC Gansu Changma Wind Power project is zero.

Leakages

Leakage does not need to be accounted for this project as per the renewed VCS PD and ACM0002, v20.0.

Emission reductions

The emission reductions for this monitoring period were calculated as:

Monitoring period	GHG emission reductions or removals (tCO _{2e})
01/01/2022-31/12/2022	320,339
01/01/2023-30/04/2023	119,573
Total ERs claimed (in 485 days)	439,912

4.4 Quality of Evidence to Determine Reductions and Removals

The assessment of each parameter related to calculate the GHG emission reductions is justified in Sections 4.1 and 4.4 above. Via the on-site inspection and desk review, the verification team verified the supporting evidence provided by the project proponent as listed in Appendix 3 used to determine the GHG emission reductions

For each reported data, the evidence is provided and verified as sufficient and quality is appropriate. Also, the cross-checks have been performed on the reported data with different source of evidence. The information flow from data generation and aggregation, to recording, calculation and final transposition into the monitoring report has been assessed by VVB in Section 4.4. Moreover, the calibration is verified as stated in Section 4.1 via on-site inspection with evidences to confirm the meters' location, accuracy and calibration frequency are in line with requirement of the monitoring plan.

Therefore, it is concluded that the evidence provided are verified as sufficient and quality is appropriate and thus the evidence can be used to determine the GHG emission reductions and removals for this monitoring period.

4.5 Non-Permanence Risk Analysis

The project is not AFOLU project, and thus non-permanence risk analysis is not applicable for the project.

5 VERIFICATION OPINION

5.1 Verification Summary

Shenzhen CTI International Certification Co., Ltd (CTI) has performed the verification of the emission reductions that have been reported for the project activity “CECIC HKC Gansu Changma Wind Power project” in China (VCS Project ID: 717) for the period 01-Jan-2022 to 30-April-2023. The verification is based on the baseline and monitoring methodology ACM0002 (version 20.0), and renewed VCS PD (Version 2.0 dated 20/01/2021). The verification consisted of the following three phases:

- i) desk review of the project design and the baseline and monitoring plan;
- ii) follow-up interviews with project stakeholders;
- iii) resolution of outstanding issues and the issuance of the final verification and certification report.

The project proponents are responsible for the collection, calculation and determination of the GHG data in accordance with the monitoring plan and the reporting of GHG emission reductions on the basis set out within the project monitoring report.

Our verification approach was based on the requirements as defined under the applicable VCS Standard, version 4.7 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 renewed VCS PD (Version 2.0 dated 20/01/2021);
- the monitoring plan in renewed VCS PD (Version 2.0 dated 20/01/2021) is as per the applied methodology;
- the monitoring complies with the monitoring plan in the renewed VCS PD (Version 2.0 dated 20/01/2021);
- the monitoring report and other supporting documents provided are complete and verifiable and in accordance with the applicable VCS Standard, version 4.7 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.

It is CTI's responsibility to provide an independent verification statement on the reported GHG emission reductions for the project. Based on an understanding of the risks associated with reporting of GHG emission data and the controls in place to mitigate these, CTI planned and performed our work to obtain the information and explanations that we considered necessary to provide reasonable assurance that reported GHG emission reductions are fairly stated.

CTI does not assume any responsibility towards the issuance and utilization of the VCU's hereby verified and certified. Request for issuance of VCU's shall be made by the project proponent to an approved VCS Program Registry based on the requirements set out under the most recent version of the VCS Program Guidelines clause on VCS Registration.

The verification of reported emission reductions is based on the information made available to CTI and the engagement conditions detailed in this report. CTI cannot be held liable by any party for decisions made or not made based on this report.

5.2 Verification Conclusion

Verification period: From 01-Jan-2022 to 30-April-2023

Verified GHG emission reductions and carbon dioxide removals in the above verification period:

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Reduction VCU's (tCO ₂ e)	Removal VCU's (tCO ₂ e)	Total VCU's (tCO ₂ e)
01/01/2022-31/12/2022	320,339	0	0	320,339	0	320,339
01/01/2023-30/04/2023	119,573	0	0	119,573	0	119,573
Total	439,912	0	0	439,912	0	439,912

5.3 Ex-ante vs Ex-post ERR Comparaison

Vintage period	Ex-ante estimated reductions/removals	Achieved reductions/removals	Percent difference	Explanation for the difference
01-Jan-2022-31-Dec-2022	336,628	320,339	-4.84%	The emission reductions claimed are 439,912 tCO ₂ e in this monitoring period (i.e. 485 days). The reported

01-Jan-2023- 30-Apr-2023	110,672 ²	119,573	8.04%	emission reductions in this monitoring period are 1.65% lower than the expected values, which is resulted by the fluctuation of wind resources.
Total	447,300	439,912	-1.65%	

² The estimated annual emission reductions in the renewed VCS PD are 336,628tCO₂e, the period 01-Jan-2023- 30-Apr-2023 covers 120 days, the corresponding estimated emission reductions are calculated as $336,628/365 \times 120 = 110,672 \text{tCO}_2\text{e}$.

APPENDIX 1: COMMERCIALLY SENSITIVE INFORMATION

No commercially sensitive information has been excluded from the public version of the monitoring report.

APPENDIX 2: < ABBREVIATIONS >

CAR	Corrective Action Request
CCER	Chinese Certified Emission Reduction
CER	Certified Emission Reduction(s)
CL	Clarification request
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
CTI	CTI Certification Co., Ltd
DOE	Designated Operational Entity
EF	Emission Factor
EIA	Environmental Impact Assessment
ER	Emission Reduction
ETN	Electricity Transaction Note
EU ETS	EU Emissions Trading Scheme
FAR	Forward Action Request
FSR	Feasibility Study Report
GHG	Greenhouse Gas(es)
IREC	International Renewable Energy Certificates
MR	Monitoring Report
PD	Project Description
PP	Project Proponent
SN	Serial Number
VCS	Verified Carbon Standard
VCU	Verified Carbon Unit

APPENDIX 3: < REFERENCES >

Documentation used to verify the information provided by the project proponents

/1/	Smart Carbon Environment & Energy Limited: VER/VCU Monitoring Report for CECIC HKC Gansu Changma Wind Power project, version 01 dated 25/09/2023, version 02 dated 20-May-2024, version 03 dated 10-December-24
/2/	Smart Carbon Environment & Energy Limited.: Emission reduction calculation spreadsheet for CECIC HKC Gansu Changma Wind Power project, version 1.0 dated 25/09/2023
/3/	CECIC HKC Gansu Wind Power Co., LTD. and State Grid Gansu Electric Power Company: Power Purchase Agreement for CECIC HKC Gansu Changma Wind Power project.
/4/	CECIC HKC Gansu Wind Power Co., LTD.: VER monitoring manual and management procedure
/5/	CECIC HKC Gansu Wind Power Co., LTD: Records of training for on-site staff.
/6/	CECIC HKC Gansu Wind Power Co., LTD: Daily operation and maintenance records from 01-Jan-2022 to 30-April-2023.
/7/	CECIC HKC Gansu Wind Power Co., LTD: Monthly reading records of CECIC HKC Gansu Changma Wind Power project from 01-Jan-2022 to 30-April-2023
/8/	Gansu Power Grid Company: Electricity Transaction Notes from 01-Jan-2022 to 30-April-2023
/9/	Project Design (PD/PDD): - Registered CDM PDD, version 3 dated 24/05/2011 - Revised CDM PDD (approved by CDM EB), Version 3.2 dated 20/08/2012. - Registered VCS PD, Version 01 dated 20/10/2011. - Renewed VCS PD, Version 2.0 dated 20/01/2021. Validation Report of renewed VCS PD (Version 01.0 dated 20/01/2021)
/10/	Validation report: TÜV Rheinland Japan Ltd.: the Validation Report of registered CDM PDD, Version 06 dated 31/05/2011

	- SGS United Kingdom Limited: Validation Opinion on changes in PDD, version 2 dated 30/08/2012 - LGA Technological Center, S.A. (Applus+ Certification): the Validation Report of registered VCS PDD, Version 01 dated 20/01/2021
/11/	Monitoring Report (MR): - UNFCCC website: CDM Monitoring Reports for CECIC HKC Gansu Changma Wind Power project of previous monitoring periods - VCS Monitoring Report for CECIC HKC Gansu Changma Wind Power project of previous monitoring periods
/12/	Verification report: - SGS United Kingdom Limited and CTI: CDM Verification Reports for CECIC HKC Gansu Changma Wind Power project of previous monitoring periods - LGA Technological Center, S.A.: VCS verification report for CECIC HKC Gansu Changma Wind Power project of previous monitoring periods - Shenzhen CTI International Certification Co., Ltd.: VCS verification report for CECIC HKC Gansu Changma Wind Power project, version 01, dated 18/11/2022 (latest)
/13/	CECIC HKC Gansu Wind Power Co., LTD: nameplate of the equipment
/14/	China National Accreditation Service for Conformity Assessment: Accreditation certificates of State Grid Gansu Electric Power Company Metering Center,
/15/	State Grid Gansu Electric Power Company Metering Center.: Calibration certificates for meters M1, M2 and backup line meter covering this monitoring period
/16/	Business license of CECIC HKC Gansu Wind Power Co., LTD
/17/	State Economic and Trade Commission: Technical administrative code of electric energy metering (DL/T 448-2016)
/18/	UNFCCC, http://cdm.unfccc.int
/19/	Gold Standard, http://www.goldstandard.org/ Global Carbon Council (GCC): https://www.globalcarboncouncil.com/ Verified Carbon Standard: https://verra.org/programs/verified-carbon-standard/

/20/	China CCER Exchange Info-platform, http://cdm.ccchina.org.cn/ccer.aspx
/21/	Compulsive company list in China cap & trade scheme, issued by Ministry of Ecology and Environment of China
/22/	Pay rolls
/23/	Labor Contracts
/24/	Grievance book
/25/	Environment Impact Assessment (EIA) Report, completed by Gansu Province Environment and Science Design Institute in October 2007 and approved by Gansu Province Environment Protection Bureau on 06/11/2007
/26/	Approval of land use and project construction
/27/	Employee Management Manual and Complaint record
/28/	CECIC HKC Gansu Wind Power Co., LTD: Statement on no double counting
/29/	Land Administration Law of the People's Republic of China
/30/	International Labor Organization (ILO): https://www.ilo.org/global/lang-en/index.htm Department of Ecology and Environment of Gansu Province: https://sthj.gansu.gov.cn/ Ministry of Ecology and Environment of the People's Republic of China: https://www.mee.gov.cn/
/31/	Meter replacement record

Methodologies, tools and other guidance

/32/	Verified Carbon Standard: VCS Standard, version 4.7
/33/	Verified Carbon Standard: VCS Program Guide, version 4.4
/34/	Verified Carbon Standard: VCS Sectoral Scopes http://v-c-s.org/node/448
/35/	Verified Carbon Standard: Registration and Issuance Process, version 4.4
/36/	UNFCCC EB: Approved methodology, ACM0002, (version 20.0)

APPENDIX 4: < CORRECTIVE ACTION REQUESTS, CLARIFICATION REQUESTS AND FORWARD ACTION REQUESTS>

Table 1. Corrective Action Requests

CAR ID	Corrective Action Request	Response by Project Proponent	Verification Team Assessment
01	Monitoring Report Template, v4.3 has been updated. PP is requested to complete MR using latest version (V4.3) template.	The Monitoring Report was updated followed by the requirement of the Template.	By checking the updated MR, it is confirmed that Latest version (V4.3) MR template has been used. Therefore, CAR 01 is closed.

CAR ID	Corrective Action Request	Response by Project Proponent	Verification Team Assessment
02	The monitoring period 01/01/2022 – 03/04/2023 contains 485 days, not 495. Project proponent is requested to revise the ER calculation.	The data and relevant calculation were revised in the updated MR	By checking the updated MR and ER, it is confirmed that number of days within the monitoring period is correctly calculated and present. Therefore, CAR 02 is closed.

Table 2. CL from this verification

CL ID	Clarification Action Request	Response by Project Proponent	Verification Team Assessment
01	Project proponent is requested to provide detail justification to explain why the project as a wind power project does not affect the emissions footprint of any product(s) (goods or services) that are part of a supply chain?	The proposed project is a wind power project to generate electricity using wind power resources in the project region and to deliver to the Northwest China Power Grid (NWPG). The project does not use any products in the supply chain other than wind sources.	It is confirmed that the power generated by the project will be deliver to the Northwest China Power Grid rather than a specific location or facility, hence the project does not affect emissions associated with a good or service, which is confirmed through checking

		Therefore, the project activities do not affect the emissions footprint of any products.	the Power Purchase Agreement/3/, Monthly reading records/7/, Electricity Transaction Notes/8/ as well as on-site interview.
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Table 3. CAR from this verification

FAR ID	Forward Action Request	Response by Project Proponent	Verification Team Assessment
N/A	N/A	N/A	N/A