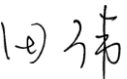


Verification and certification report form for GS project activities	
BASIC INFORMATION	
Title of the project activity	The CDQ Project in Tranvic Group
GS Reference number of the project activity	2460
Scale of the project activity	☒ Large-scale ☐ Small-scale
Version number of the verification and certification report	02
Completion date of the verification and certification report	19/05/2025
Monitoring period number and duration of this monitoring period	4th Monitoring period Duration:01/03/2020 to 12/05/2023
Version number of the monitoring report to which this report applies	Version 3.0
Crediting period of the project activity corresponding to this monitoring period	13/05/2013 to 12/05/2023
Project participants	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.
Host Party	China
Sectoral scope(s), selected methodology(ies)	Sectoral scope:01 ACM0012 Version 04.0.0 Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects
Estimated amount of annual average certified SDG impact (as per approved PDD)	SDG 13-Climate Action: 490,618 tCO ₂ e by estimation; SDG 7-Affordable and Clean Energy: 669,081.6 MWh by estimation; SDG 8-Decent Work and Economic Growth: 50 people employed and the income of staff is above local average salary level as per Transition Annex by estimation
Total amount of certified SDG impact (as per approved methodology) achieved in this monitoring period	SDG 13-Climate Action in this monitoring period is 511,858 tCO ₂ e (Only emission reductions 244,160tCO ₂ e within 3 years prior to the site visit date 17/10/2024 are claimed as per the Applicability of Minimum Site Visit Requirements By VVB) SDG 7-Affordable and Clean Energy in this monitoring period is 333,046.02 MWh SDG 8-Decent Work and Economic Growth in this monitoring period is 57 staff employed with average salary of 56,208 CNY/y, 55,802 CNY/y, 55,807 CNY/y, 56,028 CNY/y respectively in vintage 2020, 2021, 2022 and 2023, higher than local average level, and 2, 3, 3, 1 trainings have been provided respectively in vintage 2020, 2021, 2022 and 2023.
Name of the VVB	China Classification Society Certification Co., Ltd. (CCSC)

Name, position and signature of the approver of the verification and certification report	Mr. TIAN Wei, Chairman of the Board 
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SECTION A. Executive summary

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Neijiang Bowei Xinyu Chemical Industry Co., Ltd. has commissioned China Classification Society Certification Co., Ltd. (hereafter referred to as “CCSC”) to carry out the 4th periodic verification of The CDQ Project in Tranvic Group (hereafter referred to as “the Project”, GS ID: 2460) covering the monitoring period from 01/03/2020 to 12/05/2023.

A.1. Objective

The project verification is the periodic independent review and ex-post determination by a VVB of the monitored reductions in GHG emissions during defined verification period. In carrying out its verification work, the VVB shall ensure that the project activity complies with the GS4GG Principles and Requirements (version 1.2). The verification shall:

- Ensure that the project activity has been implemented and operated as per the registered PDD, and that all physical features (technology, project equipment, and monitoring and metering equipment) of the Project are in place;
- Ensure that the monitoring report and other supporting documents provided are complete in accordance with latest applicable version of the completeness checklist for requests for issuance of GS VERs and verifiable and in accordance with applicable CDM requirements and GS requirements;
- Ensure that actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan, and the approved methodology including applicable tool(s);
- Evaluate the data recorded and stored as per the monitoring methodology including applicable tool(s).

A.2. Scope

The verification scope covers the relevant documents (e.g. the registered PDD version 04, the Monitoring Plan, the approved transition documentation, the Monitoring Report, the emission reduction calculation spreadsheet, supporting documents available to the verifier and information collected through performing interviews and during the on-site assessment, GS’s tools and guidelines publicly available, relevant rules, including the host country legislation, etc.) to be independently reviewed, the Project geographical locations to be visited on-site, the Project local stakeholders to be interviewed with, and processes that are necessary to acquire objective evidence for the evaluation of the Project compliance to CDM and GS requirements.

The above verification activities are conducted according to the CDM and GS requirements. In doing so, the principles of accuracy and completeness, relevance, reliability and credibility were followed.

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

A.3. GS Project Description

The information of the Project is as follows:

Project title:	The CDQ Project in Tranvic Group
GS ID:	2460
Crediting period	fixed 13/05/2013 to 12/05/2023
Monitoring Period	4th monitoring period, 01/03/2020 to 12/05/2023 (1168 days, first and last days included)
Project Participants:	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.
Methodologies used	ACM0012 Version 04.0.0
Location and Geo coordinates:	in Lianjie town, Weiyuan county, Neijiang city, Sichuan province, P.R. of China Geo coordinates: 104°29'05"E and 29°43'11"N

The Project “The CDQ Project in Tranvic Group” is developed by Neijiang Bowei Xinyu Chemical Industry Co., Ltd., consisting of one set of 170t/h CDQ system with a capacity of 30MW steam turbine/generator unit. The purpose of the Project is to recover the waste heat released into the atmosphere in the absence of the project

activity to generate electricity for captive use. The Project was registered as a GS project on 10/03/2014. The implementation of the project is found to be in accordance with the registered PDD. According to the PDD Version 04 /24/, the annual estimated emission reductions are 153,428tCO₂e. During this monitoring period (01/03/2020 to 12/05/2023), there has been no event or situation which may impact the applicability of the applied methodology.

In summary, CCSC confirms that the project is implemented as planned and described in the registered project design documents. Installed equipment being essential for generating emission reduction run reliably and are calibrated appropriately. The monitoring system is in place and the project is generating GHG emission reductions. The GHG emission reductions are calculated without material misstatements, and the emission reductions verified totalize 511,858tons of CO₂e for this 4th monitoring period from 01/03/2020 to 12/05/2023. However, only emission reductions 244,160tCO₂e within 3 years prior to the site visit date 17/10/2024 are claimed as per the Applicability of Minimum Site Visit Requirements By VVB. Please refer to CAR-1.

A.4. GS Project verification process and conclusion

The verification is based on the currently valid documentation of the GS Foundation and the United Nations Framework Convention on Climate Change (UNFCCC).

The verification process includes three phases: 1) desk review of documents; 2) on-site inspection and follow-up interviews with the relevant personnel; 3) resolution of outstanding issues and the issuance of final verification report and opinion.

Three Corrective Action Requests (CAR) and three Clarification Requests (CL) were raised in the verification process and successfully closed upon the project participant taken actions and submitted the revised monitoring report and supporting evidence. No Forward Action Request (FAR) were raised for this monitoring period.

In summary, CCSC confirms that the Project is implemented as planned and described in the validated and registered project design documents. The registered monitoring plan is in accordance with the applied methodology and the monitoring system is in place and functional. The installed equipment for measuring parameters required for calculating emission reductions are calibrated appropriately. The Project is generating GHG emission reductions and the GHG emission reductions are calculated without material misstatements.

Based on the verified amount of emission reductions stated in the verification report, CCSC confirms the following statement, and requests the Gold Standard to issue the VERs:

GHG emission reduction for Vintage of 01/03/2020 to 31/12/2020	130,723 tCO ₂ e
GHG emission reduction for Vintage of 01/01/2021 to 31/12/2021	162,820 tCO ₂ e
GHG emission reduction for Vintage of 01/01/2022 to 31/12/2022	160,031 tCO ₂ e
GHG emission reduction for Vintage of 01/01/2023 to 12/05/2023	58,284 tCO ₂ e
Total amount of GHG emission reductions or net GHG removals by sinks achieved in this monitoring period (01/03/2020 to 12/05/2023)	511,858 tCO ₂ e

However, since the gap between two site visits conducted by VVBs was longer than 3 years, only emission reductions within 3 years prior to the site visit date 17/10/2024 are claimed as per the Applicability of Minimum Site Visit Requirements By VVB published on 16/08/2021. Please refer to CAR-1.

Therefore, the claimed emission reductions are verified as:

Period	Actual emission reductions
17/10/2021 to 31/12/2021	25,845tCO ₂ e
01/01/2022 to 31/12/2022	160,031tCO ₂ e
01/01/2023 to 12/05/2023	58,284tCO ₂ e
Total	244,160tCO ₂ e

SECTION B. Verification team, technical reviewer and approver

B.1. Verification team member

No.	Role	Last name	First name	Affiliation	Involvement in
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					(e.g. name of central or other office of VVB or outsourced entity)	Desk/document review	On-site inspection	Interviews	Verification findings
1.	Team Leader	IR	LI	Xingtong	CCSC central office	√	√	√	√
2.	Team Member	IR	WANG	Chen	CCSC central office	√	√	√	√

B.2. Technical reviewer and approver of the verification and certification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)
1.	Technical reviewer	IR	LI	Qiuyan	CCSC central office
2.	Technical reviewer	IR	LIU	Ruyun	CCSC central office
3.	Approver	IR	TIAN	Wei	CCSC central office

SECTION C. Application of materiality

All the data and information has been checked during verification; thus the concept of materiality has not applied in this verification.

C.1. Consideration of materiality in planning the verification

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	N/A	N/A	N/A	N/A

C.2. Consideration of materiality in conducting the verification

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N/A

SECTION D. Means of verification

D.1. Desk/document review

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A desk review of the MR (Version 1.0, dated 22/09/2024) /1/, and supporting documents was conducted by the verification team. The aim of the desk review of the documentation was to verify the completeness of the data and the information presented, to carry out the compliance check of the MR with respect to the monitoring plan and the applied methodology. Particular attention was given to the frequency of measurements, the quality of the metering equipment including calibration requirements, and the quality assurance and quality control procedures. The evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions was also conducted.

In addition to the monitoring documentation provided by the project participants, the VVB reviews:

- The registered GS-PDD, the approved transition documentation and the monitoring plan /24/ /25/;
- The Validation Report /26/;
- Previous monitoring reports and GS verification forms /27/;

- d) The applied monitoring methodology /28/;
- e) Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board and Gold Standard /29//30//31//32//33/;
- f) Other information and references relevant to the project activity's resulting emission reductions (e.g. IPCC reports, laboratory analysis or national regulations)

Appendix 3 to this report contains a complete list of all documents and proofs reviewed by the verification team.

D.2. On-site inspection

The verification team performed a site visit to the project site on 17/10/2024. During the site visit, the verification team interviewed with the relevant personnel and verified that the actual implementation of the Project was as described in the registered PDD /24/. This includes the review of the project operation based on the evidence of on-site observation and presented documents.

During the on-site assessment, the verification team has interviewed with key personnel of the project participants and the stakeholders. The detail of the on-site assessment including the interviewees and the main topics of the interview are summarized in the following table.

Date: 17/10/2024	
Interview topics	Interviewed Organizations and persons
-- Project implementation status, any changes from the last verification, compliance of the project implementation with the registered project design document -- The project on-site inspection including the main equipments -- Parameters monitoring and processing activities -- Review of monitoring records of the net electricity supply and Sustainable Development (SD) indicators and calibration records of monitoring meters --Quality Management; organizational structure, responsibilities and competencies; Internal QA/QC Management procedures and document control --Compliance with National Laws and Regulations	The Project Participants, including Neijiang Bowei Xinyu Chemical Industry Co., Ltd. Mr. Mo Lingbo Mr. Wu Haibo Ms. Jin Yuqi
-- Preparation of Monitoring Report -- Compliance of the monitoring plan with the monitoring methodology --Compliance of monitoring with the monitoring plan and GS4GG Transition Annex -- Assessment of data and calculation of GHG emission reductions	Neijiang Bowei Xinyu Chemical Industry Co., Ltd. Mr. Mo Lingbo Mr. Wu Haibo Ms. Jin Yuqi
-- Environmental impact of the Project -- Sustainable Development (SD) indicators	Local residents: Yang Chuangang Huang Yixing Wang Dengke Quan Liangyu Li Meng

CAR-1:

As per the GS rule Site Visit And Remote Audit Requirements And Procedures version 2.0 published on 30/05/2023 (section 3.1), frequency of physical site visits should be performed once

within every three years after the first physical site visit date. However the gap between the previous VVB (CTI) site visit 30/09/2020 and this verification 17/10/2024 is longer than 3 years.

PP's response:

PP only claim 244,160 tCO₂ from 17/10/2021 to 12/05/2023 for this monitoring period.

Verification opinion:

The verification team confirmed that only emission reductions within 3 years prior to the site visit date 17/10/2024 are claimed. This CAR is closed.

D.3. Interviews

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In particular, the questions and responses during the interview with the local stakeholders are summarized as below:

Date: 17/10/2024	
Interviewed persons: Yang Chuangang Huang Yixing Wang Dengke Quan Liangyu Li Meng	
Q1: Air quality Has there been any improvement in air quality after the project implementation? Was water sprayed for dust removal during the construction period?	Response: Yes. Air quality has been improved after the project implementation. Yes. Water was sprayed for dust removal during the construction period.
Q2: Noise What is the noise impact of the project location? Are there any measures to mitigate the impact?	Response: Yes. The noise generated by the project is acceptable from the Project is quite decent. There are measures adopted to mitigate the impact, such as soundproof wall.
Q3: Water quantity Does the project save water?	Response: Yes. The project saves water through dry quenching technology during coke production.
Q4: Solid waste How does the project deal with solid waste?	Response: The dust collected by the project was sent for comprehensive utilization, such as using as the raw material for sintering.
Q5: Stakeholder communication How do local residents communicate with project owners? How do homeowners obtain residents' opinions? Have there been any complaints regarding environmental protection?	Response: Contact information including telephone number and email address has been publicized. Grievance expression book is placed in reception rooms of Neijiang Bowei Xinyu Chemical Industry Co., Ltd.

D.4. Sampling approach

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N/A

D.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form	-	-	-
Compliance of the project implementation and operation with the registered PDD	1	-	-
Post-registration changes	1	-	-
Compliance of the registered monitoring plan with the methodologies including applicable tools and standardized baselines	-	-	-
Compliance of monitoring activities with the registered monitoring plan	-	-	-
Compliance with the calibration frequency requirements for measuring instruments	-	-	-
Assessment of data and calculation of emission reductions or net removals	1	3	-
Assessment of reported sustainable development co-benefits	-	-	-
Global stakeholder consultation	-	-	-
Others (please specify)	-	-	-
Total	3	3	0

SECTION E. Verification findings

E.1. Compliance of the monitoring report with the monitoring report form

Means of verification	Through cross-check and comparison, to confirm the applied monitoring report form is valid and listed in GS website.
Findings	- The MR /1//2/ used the monitoring form available at GS website. - The MR /1//2/ is complete and meet all requirements of Instructions for filling out the GS4GG monitoring report form (version 1.1, dated 14/10/2020) /32/. No CARs/CLs/FARs raised in this section.
Conclusion	According to requirements of GS4GG /33/, CCSC verification team confirms that the monitoring report was compliance with relevant monitoring report form and instructions therein.

E.2. Remaining forward action requests from validation and/or previous verifications

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This is the 4th periodic verification. There are no remaining forward action requests from previous verifications, validation and GS review.

E.3. Compliance of the project implementation and operation with the registered project design document

Means of verification	The verification team has performed an on-site inspection to assess: a) All physical features (technology, project equipment, and monitoring and metering equipment) of the registered GS project activity are in place. b) The PP have operated the GS project activity as per the registered PDD version 04.
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	The verification team has: • Checked the local map indicating the project sites for the project location and geo-coordinates; • Checked the Nameplates of the main equipments /11/ to confirm that the project equipment installation is in place and is consistent with the registered PDD. • Reviewed the maintenance records to confirm the Project has been operated as per the registered PDD.																																		
Findings	The verification team checked the project location and geo-coordinates of each sub project against the registered PDD and confirm the project location and geo-coordinates. The CDQ Project in Tranvic Group (hereafter referred to as the “the project”) is sited within the production area of Tranvic Group, Lianjie town, Weiyuan county, Neijiang city, Sichuan province, P.R. of China, with central geographical coordinates of east longitude of 104°29’05”and north latitude of 29°43’11”. The Project installed one set of 170t/h CDQ system with a capacity of 30MW steam turbine/generator unit to recover the waste heat released into the atmosphere in the absence of the project activity to generate electricity for captive use, and estimated annual net electricity supply amounts to 209,088MWh. The electricity generated by the Project displace electricity which would have been supplied by the operation of grid-connected power plants and by the addition of new generation sources within the Central China Power Grid, which is the same as the baseline scenario of the project. By recovering the waste heat generated in coke production for captive use to displace the equivalent electricity generation by the Central China Power Grid, the project leads to the reduction of CO₂ emissions into the atmosphere. The project activity achieves average greenhouse gas (GHG) emission reductions of 153,428 tCO₂e annually. Relevant dates for the Project are as follows, which has been confirmed during validation and previous verifications: Construction start date: 01/06/2012 Commissioning start date: 13/05/2013 Major technical parameters of the key equipments employed by the project are illustrated in the table below, which was confirmed against the Nameplates of the main equipments /11/ during onsite inspection. <table><tr><th colspan="2">Main Technical Data</th><th>The project</th></tr><tr><td rowspan="5">Waste Heat Boiler</td><td>Type</td><td>Q270/970-108.3-9.8/540</td></tr><tr><td>Unit</td><td>1</td></tr><tr><td>Capacity</td><td>108.3 t/h</td></tr><tr><td>Operational Life</td><td>20</td></tr><tr><td>Manufacture</td><td>Hangzhou Boiler Group Co., Ltd.</td></tr><tr><td rowspan="6">Steam Turbine</td><td>Model</td><td>Condensing</td></tr><tr><td>Type</td><td>N30-8.83</td></tr><tr><td>Unit</td><td>1</td></tr><tr><td>Rated Capacity</td><td>30MW</td></tr><tr><td>Rated Speed</td><td>3000r/min</td></tr><tr><td>Manufacture</td><td>Qingdao Jieneng Steam Turbine Group Co., Ltd.</td></tr><tr><td rowspan="3">Generator</td><td>Type</td><td>QF₂W-30-2</td></tr><tr><td>Unit</td><td>1</td></tr><tr><td>Rated Capacity</td><td>30MW</td></tr></table>	Main Technical Data		The project	Waste Heat Boiler	Type	Q270/970-108.3-9.8/540	Unit	1	Capacity	108.3 t/h	Operational Life	20	Manufacture	Hangzhou Boiler Group Co., Ltd.	Steam Turbine	Model	Condensing	Type	N30-8.83	Unit	1	Rated Capacity	30MW	Rated Speed	3000r/min	Manufacture	Qingdao Jieneng Steam Turbine Group Co., Ltd.	Generator	Type	QF ₂ W-30-2	Unit	1	Rated Capacity	30MW
Main Technical Data		The project																																	
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	Unit	1																																	
	Rated Capacity	30MW																																	
	Rated Speed	3000r/min																																	
	Manufacture	Qingdao Jieneng Steam Turbine Group Co., Ltd.																																	
Generator	Type	QF ₂ W-30-2																																	
	Unit	1																																	
	Rated Capacity	30MW																																	

	Rated voltage	10,500V
	Rated frequency	50HZ
	Rated Power factor	0.8
	Operational Life	20
	Manufacture	Dongfang Electric Consortium Dongfeng Electric Machinery Co., Ltd.
[Power System and Metering System] Through the on-site observation and the interview with relevant staffs, and reviewing the Line diagrams of power connection system /4/, the verification team confirmed the electricity generated by the project was delivered to the captive grid of Tranvic Group, which covers the production area of Tranvic Group, including the Project. Three meters M1, M2 and M3 were installed, and M1 meter measures the power generation of the Project, M2 meter measures quantity of net electricity generation supplied by the project for captive use, and M3 meter measures the self-use electricity from the 10kV backup line. The meters have been installed in accordance with the monitoring plan. [Management System] The verification team has verified Monitoring Manual and training records /17//18/ provided by the PP, and found that the Management System for the Project is in place. The organization structures with the responsibilities have been properly identified. The data management system works well, the monitoring parameters have been properly measured as per the monitoring plan and the records have been documented by assigned monitoring staff. <u>Project representative and host country in the KEY PROJECT INFORMATION of cover page of the monitoring report are incorrect. Therefore, the CL-1 was raised.</u> PP's response: Project representative and host country in the KEY PROJECT INFORMATION of cover page has been corrected in the revised monitoring report. Verification opinion: Revision was confirmed. This CL is closed out.		
Conclusion	CCSC verification team confirms that: • The implementation status and equipment installation of the GS project activity are consistent with the registered PDD /24/ and the approved transition documentation /25/; • The actual operation of the GS project activity is as per the registered PDD /24/ by the PP; • Information (data and variables) provided in the monitoring report is in accordance with that stated in the registered PDD /24/ and the approved transition documentation /25/.	

E.4. Post-registration changes

E.4.1. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents

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N/A

E.4.2. Corrections

>>

N/A

E.4.3. Changes to the start date of the crediting period

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CL-2: It is to be clarified whether the project changed the start date of the crediting period.

PP's response:

It is clarified that the start date of the crediting period has not been changed after it has been registered as a GS project. Monitoring report was revised accordingly.

Verification opinion:

The start date of the crediting period is confirmed consistent with the transition annex of the project. Revision was confirmed. This CL is closed out.

E.4.4. Inclusion of a monitoring plan

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N/A

E.4.5. Permanent changes from registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other methodological regulatory documents

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N/A

E.4.6. Changes to the project design

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N/A

E.4.7. Changes specific to afforestation and reforestation project activities

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N/A

E.5. Compliance of the registered monitoring plan with applied methodologies, applied standardized baselines, and other applied methodological regulatory documents

Means of verification	The registered monitoring plan of the Project has been assessed against the monitoring methodology /28/ including applicable tools.
Findings	The monitoring plan in the registered PDD and the approved transition documentation of the Project is in accordance with the approved CDM baseline and monitoring methodology ACM0012 Version 04.0.0 Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects applied by the Project. No CARs/CLs/FARs raised in this section.
Conclusion	CCSC verification team confirms that the monitoring plan in the registered PDD /24/ and the approved transition document /25/ is in accordance with the approved methodology and, where applicable, the applied standardized baseline, applied by the GS project activity, i.e. ACM0012 Version 04.0.0. Therefore, the Project is also in compliance with the requirements of GS4GG /33/.

E.6. Compliance of monitoring activities with the registered monitoring plan

E.6.1. Data and parameters fixed ex ante or at renewal of crediting period

Means of verification	The data and parameters fixed ex-ante used to calculate emission reductions include: 1. Combined Margin CO₂ emission factor of the Central China Power Grid in year y (EF_{grid,CM,y}) 2. Fraction of total energy generated by the project activity using waste gas (f_{wcm}) 3. Energy that would have been produced in project year y using waste energy generated in base year expressed as a fraction of total energy produced using waste source in year y (f_{cap}) 4. Output/intermediate energy that can be the theoretically produced, to be determined on the basis of maximum recoverable energy from the WECM, which would have been wasted in the absence of the project (Q_{OE,BL}) These parameters reported in the MR /2/ have been checked against the PDD /24/ and the applied methodology /28/ by the verification team.															
Findings	The data and parameters fixed ex-ante include the following parameters: 1. Combined Margin CO₂ emission factor of the Central China Power Grid in year y (EF_{grid,CM,y}) 2. Fraction of total energy generated by the project activity using waste gas (f_{wcm}) 3. Energy that would have been produced in project year y using waste energy generated in base year expressed as a fraction of total energy produced using waste source in year y (f_{cap}) 4. Output/intermediate energy that can be the theoretically produced, to be determined on the basis of maximum recoverable energy from the WECM, which would have been wasted in the absence of the project (Q_{OE,BL}) The parameters reported in the MR /2/ have been checked against the PDD /24/ and the applied methodology /28/ by the verification team. Confirmed data: <table><tr><td>Parameter</td><td>Value</td><td>Unit</td></tr><tr><td>EF_{grid,CM,y}</td><td>0.7338</td><td>tCO₂e/MWh</td></tr><tr><td>f_{wcm}</td><td>1</td><td>/</td></tr><tr><td>f_{cap}</td><td>1</td><td>/</td></tr><tr><td>Q_{OE,BL}</td><td>254,368.7999</td><td>MWh</td></tr></table> No CARs/CLs/FARs raised in this section.	Parameter	Value	Unit	EF _{grid,CM,y}	0.7338	tCO ₂ e/MWh	f _{wcm}	1	/	f _{cap}	1	/	Q _{OE,BL}	254,368.7999	MWh
Parameter	Value	Unit														
EF _{grid,CM,y}	0.7338	tCO ₂ e/MWh														
f _{wcm}	1	/														
f _{cap}	1	/														
Q _{OE,BL}	254,368.7999	MWh														
Conclusion	In conclusion, according to the requirement of GS4GG /33/ and based on CCSC's local and sectorial knowledge, CCSC confirms that: The data and parameters fixed ex ante have been sufficiently monitored and correctly listed.															

E.6.2. Data and parameters monitored

Means of verification	(a) According to Para. 361 of VVS-PA Version 03.0 /29/ and GS4GG version 1.2 /33/, CCSC has performed the following activities to determine whether the monitoring of parameters related to the relevant SDG indicators have been implemented in accordance with the registered monitoring plan in the registered PDD and the approved transition documentation of the Project. (b) Through the on-site inspection of the monitoring system, interview with the PP, document review including relevant records, procedures and technical
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	specifications, the verification team has assessed the implementation of the registered monitoring plan followed by the PP; (c) The parameters stated in the registered monitoring plan and GS transition document has been checked by means above; (d) Based on the interview with the top management, operation staff, the CCSC has assessed the quality assurance and quality control procedures applied by the PP; (e) The documented evidence, including Daily Settlement Data for Unit Consumption /6/, etc. were checked by the verification team to confirm the monitoring results.
Findings	<u>Emission reductions related parameters</u> According to the registered monitoring plan, the parameters for emission reductions calculation which need to be monitored include: (1) $EG_{PJ,y}$, Quantity of net electricity generation supplied by the project for captive use This parameter is measured by electricity meter (M2), which is continuously measured and at least monthly recorded. During this monitoring period, the operation team of the project owner read and record the meter readings every day on the Daily Settlement Data for Unit Consumption /6/. The power and energy department of the project owner internally audit the recorded electricity data of each month, and confirm the data to form the Monthly energy consumption sheet of the coking plant /7/. The last day of each month is the cut-off time to calculate the monthly $EG_{PJ,y}$. Data between Daily Settlement Data for Unit Consumption /6/ and Monthly energy consumption sheet of the coking plant /7/ have been checked and confirmed consistent, which are included in the emission reductions calculation spreadsheet for ER calculation. The verification team has verified the values provided in the monitoring report (version 3.0, 06/11/2024) /2/ and ER spreadsheet /3/ against the Daily Settlement Data for Unit Consumption /6/ and Monthly energy consumption sheet of the coking plant /7/ and found them to be consistent. The Daily Settlement Data for Unit Consumption /6/ and Monthly energy consumption sheet of the coking plant /7/ can cover this monitoring period from 01/03/2020 to 12/05/2023. (2) $EG_{PJ,j,y}$, The additional power consumed in year y as a result of the implementation of the project activity source j This parameter is measured by electricity meter (M3), which is continuously measured and at least monthly recorded. During this monitoring period, the operation team of the project owner read and record the meter readings every day on the Daily records of electricity supplied by the 10kV backup line /8/. The power and energy department of the project owner internally audit the recorded electricity data of each month, and confirm the data to form the Monthly settlement for electricity supplied by the 10kV backup line /9/. The last day of each month is the cut-off time to calculate the monthly result. Data between Daily records of electricity supplied by the 10kV backup line /8/ and Monthly settlement for electricity supplied by the 10kV backup line /9/ have been checked and confirmed consistent, which are included in the emission reductions calculation spreadsheet for ER calculation. The verification team has verified the values provided in the monitoring report (version 3.0, 06/11/2024) /2/ and ER spreadsheet /3/ against the Daily records of electricity supplied by the 10kV backup line /8/ and Monthly energy consumption sheet of the coking plant /7/ and found them to be consistent. The Daily records of electricity supplied by the 10kV backup line /8/ and Monthly settlement for electricity supplied by the 10kV backup line /9/ can cover this monitoring period from 01/03/2020 to 12/05/2023.

(3) $Q_{OE,y}$, Quantity of actual output energy during year y, i.e. the total power generation of the power plant

This parameter is measured by electricity meter (M1), which is continuously measured and at least monthly recorded. During this monitoring period, the operation team of the project owner read and record the meter readings every day on the Daily Settlement Data for Unit Consumption /6/. The power and energy department of the project owner internally audit the recorded electricity data of each month, and confirm the data to form the Monthly energy consumption sheet of the coking plant /7/. The last day of each month is the cut-off time to calculate the monthly result. Data between Daily Settlement Data for Unit Consumption /6/ and Monthly energy consumption sheet of the coking plant /7/ have been checked and confirmed consistent, which are included in the emission reductions calculation spreadsheet for ER calculation.

The verification team has verified the values provided in the monitoring report (version 3.0, 06/11/2024) /2/ and ER spreadsheet /3/ against the Daily Settlement Data for Unit Consumption /6/ and Monthly energy consumption sheet of the coking plant /7/ and found them to be consistent. The Daily Settlement Data for Unit Consumption /6/ and Monthly energy consumption sheet of the coking plant /7/ can cover this monitoring period from 01/03/2020 to 12/05/2023.

(4) $TDL_{j,y}$, Average technical transmission and distribution losses for providing electricity to source j in year y

This parameter is sourced from public official data: <http://www.nea.gov.cn/>. Latest available data of the year 2020-2022 is used in ER calculation which is confirmed by the verification team. Since the value of this parameter is unavailable currently, the maximum value among the year 2020-2022 is applied for the year 2023, which is conservative as it is used to calculate the project emissions.

(5) Abnormal operation of the project facility including emergencies and shut down (The hours of abnormal operation of parts of project facility that can have an impact on waste energy generation and recovery)

As per the applied methodology ACM0012 Version 04.0.0, this parameter has to be monitored to demonstrate that no emission reduction is claimed for the hours during the abnormal operation of the part of project facility which have impact on waste energy generation and recovery. The verification team checked the Operation log during the monitoring period /5/ during the onsite inspection and confirmed that the hours of abnormal operation of parts of project facility that can have an impact on waste energy generation and recovery is 840h, including the period of overhaul in 2021. The verification team has checked the electricity monitoring results and the emission reduction calculation and can confirm that no emission reduction is claimed during the abnormal operation period.

Daily data of the monitoring parameters for calculating the emission reductions were recorded by the PP /6//8/, and the daily data were accumulated for monthly recordings /7//9/. Since CAR-1 was raised because the requirement was not met that the frequency of physical site visits should be performed once within every three years after the first physical site visit date. To fix this issue, the PP only claim 244,160 tCO₂ from 17/10/2021 to 12/05/2023 for this monitoring period. In doing this, daily recordings of the parameters were used for calculating the exact daily emission reductions prior to 17/10/2021 which was excluded in the monitoring report.

CAR-2:

Monitoring results of the electricity parameters $EG_{PJ,y}$, $EG_{PJ,y}$, $Q_{OE,y}$ of the period 01/05/2024 to 12/05/2023 are not consistent with the documented evidence.

PP's response:

Monitoring results of the electricity parameters $EG_{PJ,y}$, $EG_{PJ,j,y}$, $Q_{OE,y}$ of the period 01/05/2024 to 12/05/2023 have been revised in the monitoring report and emission reduction calculation spreadsheet according to the evidence including Daily Settlement Data for Unit Consumption /6/, Monthly energy consumption sheet of the coking plant /7/, Daily records of electricity supplied by the 10kV backup line /8/ and Monthly settlement for electricity supplied by the 10kV backup line /9/. Emission reductions have been recalculated accordingly.

Verification opinion:

Revision was checked and confirmed. This CAR is closed out.

CAR-3

Monitored data of the $TDL_{i,y}$ should be updated with latest available sources. Emission reductions have to be revised accordingly.

PP's response:

Latest available data of the year 2020-2022 of the public official data form China Electric Power Statistical Yearbook 2023 is used in ER calculation. Since the value of this parameter is unavailable currently, the maximum value among the year 2020-2022 is applied for the year 2023 for conservative purpose.

Verification opinion:

Revision was checked and confirmed. This CAR is closed out.

Management and operational system:

The PP has operated the Project as per the registered PDD. The monitoring organization has been set up and all monitoring staffs have been trained. Monitoring & Management Manual /17/ and internal training records /18/ were provided and have been verified by the verification team. CCSC confirms that all the documents required by the monitoring plan have been stored. CCSC has verified the documents and confirms that the PP managed and operated the project during the monitoring period in accordance with the monitoring plan.

SDG related parameters

Besides, the Project benefits to the local sustainable development, complies with the PDD. As per the registered GS-PDD /24/ and the approved transition documentation of the Project /25/, the parameters related to the 3 SDG relevant targets have been selected in accordance with the requirements of GS4GG:

SDG 13: Climate Action

GHG Emission reduction (ER_y) is calculated with monitoring parameters including $EG_{PJ,y}$, $EG_{PJ,j,y}$, $Q_{OE,y}$, and $TDL_{i,y}$. Abnormal operation of the project facility including emergencies and shut down, and the ex-ante fixed parameters including $EF_{grid,CM,y}$, f_{wcm} , f_{cap} , and $Q_{OE,BL}$. Monitoring activities of this parameter are described above.

SDG 7: Affordable and Clean Energy

Related monitoring parameters include $EG_{PJ,y}$, $EG_{PJ,j,y}$, $Q_{OE,y}$. Monitoring activities of this parameter are described above.

SDG 8: Decent Work and Economic Growth

Monitoring parameter: Number of employments and Level of income generation and Staff training

The employee number and their salary level were recorded by the project owner.

Payroll records /19/ and Internal training records /18/ were provided and checked. Salary of employees of year 2021-2023 was compared with local average salary level of year 2022. The project organizes trainings for the staffs on the technology and monitoring of the plant operation, and the emergency and safety procedures, etc.

CL-3:

Latest available local average salary level sourced from the Neijiang Statistic Yearbook 2024 should be used for comparison to the monitoring parameter, staff income generation.

PP's response:

As of the present day, we have only found the statistical yearbook for 2023 of Neijiang City, with statistical data of 2020 to 2022 included, so we will use the local average salary level from it as the source to the monitoring parameter, staff income generation. Since statistical data of 2023 is not available, statistical data of 2022 is used for the comparison of actual income rate of 2022.

Verification opinion:

Public source from the website of the Neijiang Government (<https://www.neijiang.gov.cn/>) has been checked and confirmed that there is only Neijiang Statistic Yearbook 2023 which is the latest local statistic data of the year 2022 for reference, while the Neijiang Statistic Yearbook 2024 was not published yet. Therefore the verification team confirmed that it is appropriate for the PP to use local statistic data of the years 2020 to 2022 for comparison to the monitoring parameter, staff income generation.

This CL is closed out.

The following 3 safeguarding principles included in the monitoring report were verified during onsite inspection through interviews against local stakeholders and document review. Details of onsite interviews are described in the section D.3.

1) Air quality

Water sprinkling was carried out in the construction period as per the registered passport to reduce the dust in the air. Dust removal system was operated well during this monitoring period, which is evidenced by the dust remove system operation log /21/. Dust was collected during the monitoring period.

2) Water quantity

Water consumption was reduced since the project applies dry quench technology against wet quench technology. Water quantity saved by the project is calculated by the coke production during this monitoring period, which is confirmed by the coke production records /22/.

3) Other pollutants (Solid waste)

Solid waste was effectively reused and periodically cleaned by the sanitation department, no any impact on local environment and community, on-site staff and local residents give higher positive comment on solid waste treatment, which is evidenced by the dust remove system operation log /21/.

Continuous grievance mechanism

Grievance Expression Process Book /23/ placed in the office of the project owner has been checked. Besides, the verification team confirm the opinion of the local stakeholders by interview during onsite inspection. The verification team can confirm that no inputs or grievances against the project were received for the project during the monitoring period.

Conclusion	CCSC verification team confirms that: - The monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD /24/ and the approved transition documentation /25/. - All parameters required by the monitoring plan have been sufficiently monitored and correctly listed. The monitored data for required parameters have been verified by checking the whole information flow.
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E.6.3. Implementation of sampling plan

Means of verification	All the data and information has been checked during verification, thus no sampling plan has been applied in the project.
Findings	N/A
Conclusion	N/A

E.7. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	The verification team has verified the calibration reports /12/ against the registered monitoring plan and relevant national or local standards.																								
Findings	During this monitoring period, the installed measuring instruments have been operating well and were calibrated. The calibration records of the export meters are shown in Table 1 below. Information is confirmed by checking the evidence /12/. Table 1 The calibration records of the meters <table><tr><th>Meter</th><th>Monitoring parameter</th><th>SN</th><th>Accuracy</th><th>Calibration date</th><th>Calibration frequency</th></tr><tr><td>M2</td><td>EG_{PJ,y}</td><td>12040254</td><td>0.5%</td><td>01/03/2020, 29/12/2020, 25/12/2021, 21/12/2022</td><td>annually</td></tr><tr><td>M3</td><td>EC_{PJ,j,y}</td><td>12070107</td><td>0.5%</td><td>01/03/2020, 29/12/2020, 25/12/2021, 21/12/2022</td><td>annually</td></tr><tr><td>M1</td><td>Q_{OE,y}</td><td>D1165647</td><td>0.2S</td><td>01/03/2020, 29/12/2020, 25/12/2021, 21/12/2022</td><td>annually</td></tr></table> Calibrator: Sichuan P.R. China Chuanwei Group of Measurement and Testing Calibration certification authorized by: Sichuan Neijiang Quality and Technical Supervision Bureau Certification authorization period: 26/06/2018 to 08/06/2023 All the export meters were calibrated as per the requirement that “meters shall be calibrated annually”, which is required by the registered PDD and complies with the industry standard Verification regulation of Electrical Meters for Measuring Alternating-current Electrical Energy (JJG596-2012) /15/. The accuracy requirement that the accuracy of the meters shall be respectively 0.2S for M1 and 0.5% for M2 and M3 was met, which complies with the industry standard Technical administration code of electricity energy metering (DL/T 448-2016) /14/.	Meter	Monitoring parameter	SN	Accuracy	Calibration date	Calibration frequency	M2	EG _{PJ,y}	12040254	0.5%	01/03/2020, 29/12/2020, 25/12/2021, 21/12/2022	annually	M3	EC _{PJ,j,y}	12070107	0.5%	01/03/2020, 29/12/2020, 25/12/2021, 21/12/2022	annually	M1	Q _{OE,y}	D1165647	0.2S	01/03/2020, 29/12/2020, 25/12/2021, 21/12/2022	annually
Meter	Monitoring parameter	SN	Accuracy	Calibration date	Calibration frequency																				
M2	EG _{PJ,y}	12040254	0.5%	01/03/2020, 29/12/2020, 25/12/2021, 21/12/2022	annually																				
M3	EC _{PJ,j,y}	12070107	0.5%	01/03/2020, 29/12/2020, 25/12/2021, 21/12/2022	annually																				
M1	Q _{OE,y}	D1165647	0.2S	01/03/2020, 29/12/2020, 25/12/2021, 21/12/2022	annually																				

	No CARs/CLs/FARs raised in this section.
Conclusion	CCSC verification team confirms that: The calibration is not applicable at the frequency as specified by the methodology and the monitoring plan contained in the registered PDD and approved transition documentation.

E.8. Assessment of data and calculation of SDG outcomes

E.8.1. Calculation of net benefits as difference of baseline and project values or direct calculation for each SDG outcome

Means of verification	According to GS4GG and the Para.374 of VVS-PA Version 03.0, the verification team has performed the following activities to assess the data and calculations of GHG emission reductions achieved by the Project as per the methodology ACM0012 Version 04.0.0 Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects /28/: (a) Through desk review on the monitored data to verify that a complete set of data for the specified monitoring period is available. (b) Information provided in the monitoring report has been cross-checked with other sources; (c) Review the calculations of baseline GHG emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan /24/, and ACM0012 Version 04.0.0 Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects /28/; (d) Review IPCC default values, GWPs and other reference values as per the registered PDD and the approved transition documentation.
Findings	<u>Calculation of emission reductions</u> A complete set of data for the specified monitoring period is available. The data pertaining to the above parameter are maintained in the identified records. All the data are in compliance with that stated in the MR version 3.0, dated 06/11/2024. As per the registered PDD, the emission reductions for the Project are calculated as the baseline emissions minus the project emission. Hence the emission reduction is determined by the following formula: $ER_y = BE_y - PE_y$ Where, ER_y: Emission reductions BE_y: Baseline emissions PE_y: Project emissions <u>[Baseline emissions]</u> As per the registered PDD, baseline emissions are calculated as follows: $BE_y = BE_{En,y} + BE_{fst,y}$ Where:

BE_y = The total baseline emissions during the year y in tCO_2
 $BE_{En,y}$ = The baseline emissions from energy generated by the project activity during the year y in tCO_2
 $BE_{fist,y}$ = Baseline emissions from fossil fuel combustion, if any, either directly for flaring or for steam generation that would have been used for flaring the waste gas in the project activity (tCO_2).

As the project only involves the utilization of waste heat, hence, $BE_{fist,y}=0$.
Therefore,

$$BE_y = BE_{En,y}$$

“Baseline scenario-1” has been selected as the project’s baseline scenario, therefore $BE_{En,y}$ can be calculated by the following formula:

$$BE_{En,y} = BE_{Elec,y} + BE_{Ther,y}$$

Where:

$BE_{Elec,y}$ = Baseline emissions from electricity, which is used for power generation and mechanical energy used to provide mechanical energy during the year y (tCO_2).
 $BE_{Ther,y}$ = Baseline emissions from thermal energy (due to heat generation by electricity) which is used for both useful heat as well as driving steam turbines to produce mechanical energy during the year y (tCO_2).

As the Project utilizes waste heat for electricity power generation only, no thermal energy is involved in the project, $BE_{Ther,y} = 0$.

Baseline emissions from electricity represent both the power generation and mechanical energy generation based on electric motors at the recipient facility and replaced by the project activity, therefore,

$$BE_{Elec,y} = f_{cap} \times f_{wcm} \times \left(\sum_j BE_{EL,j,y} + \sum_j BE_{ME,j,y} \right)$$

Where:

$BE_{Elec,y}$ = Baseline emissions from electricity during the year y (tCO_2)
 f_{wcm} = Fraction of total electricity generated by the project activity using waste energy. It is 1 if the electricity generation is purely from use of waste energy.
 f_{cap} = The ratio of waste energy generated at a historical level, expressed as the waste energy used in the project activity for producing useful energy to the waste energy generated in project year y is the same or less than the historical level.
 $BE_{EL,j,y}$ = Baseline emissions corresponding to the electricity supplied in year y to the recipient facility j as case (1a) described below during the year y.
 $BE_{ME,j,y}$ = Baseline emissions corresponding to the supply of mechanical energy to the recipient facility j as per case (2a) and case (2b) described below during the year y (tCO_2)

As the Project utilizes waste heat for electricity power generation only, no mechanical energy is involved in the project, $BE_{ME,j,y} = 0$

Case 1: recipients whose project level electricity consumption is less than or up to the maximum capacity of the existing pre-project equipment at the recipient facility

$$BE_{EL,j,y} = \sum_i (EG_{i,j,y} \times EF_{Elec,i,j,y})$$

Where:

$EG_{i,j,y}$ = The power supplied by the project activity to the recipient facility the project activity would have been sourced from baseline source the identified baseline scenario for recipient facility j (MWh)

$EF_{Elec,i,j,y}$ = The CO₂ emission factor for the baseline electricity source i, scenario for the recipient facility j, during the year y (tCO₂/MWh)

Therefore,

$$BE_{Elec,y} = f_{cap} \times f_{wcm} \times \sum_j \sum_i (EG_{i,j,y} \times EF_{Elec,i,j,y})$$

Since the electricity supply of identified baseline scenario come from Central China Power Grid, and the project only involves the utilization of waste heat, hence, equation (5) changes to:

$$BE_{Elec,y} = f_{cap} \times f_{wcm} \times EG_{PJ,y} \times EF_{grid,CM,y}$$

Where:

$EG_{PJ,y}$ = Quantity of net electricity generation supplied by the project for c

$EF_{grid,CM,y}$ = Combined Margin CO₂ emission factor of CCPG in year y (tCO₂

$EF_{grid,CM,y}$ was calculated ex-ante and will not be changed during the monitoring period. As per the registered PDD of the Project, the value is 0.7338tCO₂/MWh. As confirmed in section E.6, the parameter f_{cap} and f_{wcm} are both 1.

Monitored results of $EG_{PJ,y}$ are confirmed in the section E.6 which are recorded in the Daily Settlement Data for Unit Consumption /6/. The verification team has cross-checked the values from the Daily Settlement Data for Unit Consumption /6/ with those reported in the MR version 3.0, dated 06/11/2024 and the ER spreadsheet, and found them to be consistent.

Therefore the baseline emissions are calculated as follows:

period		$EG_{PJ,y}$ measured by M2	$EF_{grid,CM,y}$	BE _y
		(MWh)	(tCO ₂ /MWh)	(tCO ₂)
01-03-2020	31-03-2020	20187.51	0.7338	14813.59
01-04-2020	30-04-2020	19778.500	0.7338	14513.46
01-05-2020	31-05-2020	21478.000	0.7338	15760.56
01-06-2020	30-06-2020	19304.828	0.7338	14165.88
01-07-2020	31-07-2020	19303.155	0.7338	14164.66
01-08-2020	31-08-2020	21765.563	0.7338	15971.57
01-09-2020	30-09-2020	7885.669	0.7338	5786.50
01-10-2020	31-10-2020	18433.805	0.7338	13526.73
01-11-2020	30-11-2020	20481.135	0.7338	15029.06
01-12-2020	31-12-2020	20135.875	0.7338	14775.71

Total in 2020 vintage		178305.602	0.7338	130840
01-01-2021	31-01-2021	22156.762	0.7338	16258.63
01-02-2021	28-02-2021	19649.360	0.7338	14418.70
01-03-2021	31-03-2021	21568.480	0.7338	15826.95
01-04-2021	30-04-2021	20029.000	0.7338	14697.28
01-05-2021	31-05-2021	21030.500	0.7338	15432.18
01-06-2021	30-06-2021	21220.140	0.7338	15571.34
01-07-2021	31-07-2021	20150.310	0.7338	14786.30
01-08-2021	31-08-2021	19809.465	0.7338	14536.19
01-09-2021	30-09-2021	19759.710	0.7338	14499.68
01-10-2021	31-10-2021	12917.700	0.7338	9479.01
01-11-2021	30-11-2021	12571.275	0.7338	9224.80
01-12-2021	31-12-2021	20022.900	0.7338	14692.80
Total in 2021 vintage		222089.804	0.7338	162969
01-01-2022	31-01-2022	18411.210	0.7338	13510.15
01-02-2022	28-02-2022	17892.735	0.7338	13129.69
01-03-2022	31-03-2022	18994.785	0.7338	13938.37
01-04-2022	30-04-2022	16908.795	0.7338	12407.67
01-05-2022	31-05-2022	17770.440	0.7338	13039.95
01-06-2022	30-06-2022	17448.660	0.7338	12803.83
01-07-2022	31-07-2022	19002.690	0.7338	13944.17
01-08-2022	31-08-2022	19217.055	0.7338	14101.47
01-09-2022	30-09-2022	18125.235	0.7338	13300.30
01-10-2022	31-10-2022	18390.285	0.7338	13494.79
01-11-2022	30-11-2022	17582.580	0.7338	12902.10
01-12-2022	31-12-2022	18540.945	0.7338	13605.35
Total in 2022 vintage		218285.415	0.7338	160177
01-01-2023	31-01-2023	18571.635	0.7338	13627.87
01-02-2023	28-02-2023	18043.395	0.7338	13240.24
01-03-2023	31-03-2023	20308.875	0.7338	14902.65
01-04-2023	30-04-2023	15810.930	0.7338	11602.06
01-05-2023	12-05-2023	6762.960	0.7338	4962.66
Total in 2023 vintage		79497.795	0.7338	58335
Total of this monitoring period		698178.616	0.7338	512321

The verification team confirmed the calculation of baseline emissions as reported in the MR and the ER spreadsheet is correct.

[Project emissions]

As per the registered PDD, project emissions are calculated as follows:

$$PE_y = PE_{AF,y} + PE_{EL,y}$$

Where:

	PE_y = Project emissions due to the project activity (tCO ₂)																																																								
	$PE_{AF,y}$ = Project activity emissions from on-site consumption of fossil fuels and/or co-generation plant(s) if they are used as supplementary fuel, or the availability of waste energy to the project activity or due to any other reason for the project, $PE_{AF,y}=0$																																																								
	$PE_{EL,y}$ = Project activity emissions from on-site consumption of electricity for equipment or other supplementary electricity consumption (tCO ₂)																																																								
	Then,																																																								
	$PE_y = PE_{EL,y}$																																																								
	According to Tool to calculate baseline, project and/or leakage emissions from power consumption Version 01, the project emission from power consumption is the following:																																																								
	$PE_{EL,y} = \sum_j EC_{PJ,j,y} \times EF_{EL,j,y} \times (1 + TDL_{j,y})$																																																								
	Where:																																																								
	$PE_{EL,y}$ = The project emissions from consumption of power in gas cleaning equipment or other supplementary project power consumption (t CO ₂ /yr)																																																								
	$EC_{PJ,j,y}$ = The additional power consumed in year y as a result of the implementation of source j (MWh)																																																								
	$EF_{EL,j,y}$ = Emission factor for power generation for source j in year y (tCO ₂ /MWh) or emission factor of Central China Power Grid, same as $EF_{grid,CM,y}$.																																																								
	$TDL_{j,y}$ = Average technical transmission and distribution losses for providing power to Sichuan Power Grid (the sub-power grid of the CCPG, where the project is located).																																																								
	$EF_{grid,CM,y}$ was calculated ex-ante and will not be changed during the monitoring period. As per the registered PDD of the Project, the value is 0.7338tCO ₂ /MWh. As confirmed in section E.6, the parameter $TDL_{j,y}$ has been updated with latest available official data.																																																								
	Monitored results of $EC_{PJ,j,y}$ are confirmed in the section E.6 which are recorded in the Daily records of electricity supplied by the 10kV backup line /8/. The verification team has cross-checked the values from the Daily records of electricity supplied by the 10kV backup line /8/ with those reported in the MR version 3.0, dated 06/11/2024 and the ER spreadsheet, and found them to be consistent.																																																								
	Therefore the project emissions are calculated as follows:																																																								
		<table><tr><th colspan="2" rowspan="2">period</th><th>$EC_{PJ,j,y}$</th><th>TDL_y</th><th>EF</th><th>PE_y</th></tr><tr><th>measured by M3 (MWh)</th><th>/</th><th>(tCO₂/MWh)</th><th>(tCO₂)</th></tr><tr><td>01-03-2020</td><td>31-03-2020</td><td>15.247</td><td>7.94%</td><td>0.7338</td><td>12.08</td></tr><tr><td>01-04-2020</td><td>30-04-2020</td><td>14.284</td><td>7.94%</td><td>0.7338</td><td>11.31</td></tr><tr><td>01-05-2020</td><td>31-05-2020</td><td>14.114</td><td>7.94%</td><td>0.7338</td><td>11.18</td></tr><tr><td>01-06-2020</td><td>30-06-2020</td><td>15.566</td><td>7.94%</td><td>0.7338</td><td>12.33</td></tr><tr><td>01-07-2020</td><td>31-07-2020</td><td>15.526</td><td>7.94%</td><td>0.7338</td><td>12.30</td></tr><tr><td>01-08-2020</td><td>31-08-2020</td><td>14.434</td><td>7.94%</td><td>0.7338</td><td>11.43</td></tr><tr><td>01-09-2020</td><td>30-09-2020</td><td>15.713</td><td>7.94%</td><td>0.7338</td><td>12.45</td></tr></table>				period		$EC_{PJ,j,y}$	TDL_y	EF	PE_y	measured by M3 (MWh)	/	(tCO ₂ /MWh)	(tCO ₂)	01-03-2020	31-03-2020	15.247	7.94%	0.7338	12.08	01-04-2020	30-04-2020	14.284	7.94%	0.7338	11.31	01-05-2020	31-05-2020	14.114	7.94%	0.7338	11.18	01-06-2020	30-06-2020	15.566	7.94%	0.7338	12.33	01-07-2020	31-07-2020	15.526	7.94%	0.7338	12.30	01-08-2020	31-08-2020	14.434	7.94%	0.7338	11.43	01-09-2020	30-09-2020	15.713	7.94%	0.7338	12.45
period		$EC_{PJ,j,y}$	TDL_y	EF	PE_y																																																				
		measured by M3 (MWh)	/	(tCO ₂ /MWh)	(tCO ₂)																																																				
01-03-2020	31-03-2020	15.247	7.94%	0.7338	12.08																																																				
01-04-2020	30-04-2020	14.284	7.94%	0.7338	11.31																																																				
01-05-2020	31-05-2020	14.114	7.94%	0.7338	11.18																																																				
01-06-2020	30-06-2020	15.566	7.94%	0.7338	12.33																																																				
01-07-2020	31-07-2020	15.526	7.94%	0.7338	12.30																																																				
01-08-2020	31-08-2020	14.434	7.94%	0.7338	11.43																																																				
01-09-2020	30-09-2020	15.713	7.94%	0.7338	12.45																																																				

01-10-2020	31-10-2020	15.812	7.94%	0.7338	12.52
01-11-2020	30-11-2020	13.654	7.94%	0.7338	10.81
01-12-2020	31-12-2020	12.907	7.94%	0.7338	10.22
Total in 2020 vintage		147.257	7.94%	0.7338	117
01-01-2021	31-01-2021	15.507	7.47%	0.7338	12.23
01-02-2021	28-02-2021	14.460	7.47%	0.7338	11.40
01-03-2021	31-03-2021	15.879	7.47%	0.7338	12.52
01-04-2021	30-04-2021	14.284	7.47%	0.7338	11.26
01-05-2021	31-05-2021	16.089	7.47%	0.7338	12.69
01-06-2021	30-06-2021	15.885	7.47%	0.7338	12.53
01-07-2021	31-07-2021	16.510	7.47%	0.7338	13.02
01-08-2021	31-08-2021	16.677	7.47%	0.7338	13.15
01-09-2021	30-09-2021	15.887	7.47%	0.7338	12.53
01-10-2021	31-10-2021	16.457	7.47%	0.7338	12.98
01-11-2021	30-11-2021	14.895	7.47%	0.7338	11.75
01-12-2021	31-12-2021	15.579	7.47%	0.7338	12.29
Total in 2021 vintage		188.109	7.47%	0.7338	149
01-01-2022	31-01-2022	14.296	6.83%	0.7338	11.21
01-02-2022	28-02-2022	14.460	6.83%	0.7338	11.34
01-03-2022	31-03-2022	15.879	6.83%	0.7338	12.45
01-04-2022	30-04-2022	14.284	6.83%	0.7338	11.20
01-05-2022	31-05-2022	15.544	6.83%	0.7338	12.19
01-06-2022	30-06-2022	15.885	6.83%	0.7338	12.45
01-07-2022	31-07-2022	16.510	6.83%	0.7338	12.94
01-08-2022	31-08-2022	16.063	6.83%	0.7338	12.59
01-09-2022	30-09-2022	15.887	6.83%	0.7338	12.45
01-10-2022	31-10-2022	16.457	6.83%	0.7338	12.90
01-11-2022	30-11-2022	14.895	6.83%	0.7338	11.68
01-12-2022	31-12-2022	15.579	6.83%	0.7338	12.21
Total in 2022 vintage		185.739	6.83%	0.7338	146
01-01-2023	31-01-2023	14.296	7.94%	0.7338	11.32
01-02-2023	28-02-2023	14.199	7.94%	0.7338	11.25
01-03-2023	31-03-2023	14.194	7.94%	0.7338	11.24
01-04-2023	30-04-2023	14.284	7.94%	0.7338	11.31
01-05-2023	12-05-2023	6.500	7.94%	0.7338	5.15
Total in 2023 vintage		63.473	7.94%	0.7338	51
Total of this monitoring period		584.578	/	0.7338	463

The verification team confirmed the calculation of project emissions as reported in the MR and the ER spreadsheet is correct.

[Leakage emissions]

No leakage needs to be considered as per the methodology ACM0012 Version

04.0.0.

[Emission reductions]

As per the calculation method above, the split of baseline emissions is as follows:

Period	Actual emission reductions
01/03/2020 to 31/12/2020	130,723tCO ₂ e
01/01/2021 to 31/12/2021	162,820tCO ₂ e
01/01/2022 to 31/12/2022	160,031tCO ₂ e
01/01/2023 to 12/05/2023	58,284tCO ₂ e
Total 01/03/2020 to 12/05/2023	511,858tCO ₂ e

Hence, the emission reduction calculations have been based on actual monitored data of the plant and the estimation or default values in this monitoring period, from 01/03/2020 to 12/05/2023 which have been verified by CCSC. Emission reduction calculations were presented in a worksheet /2//3/ and CCSC has assessed the calculations to be complete and transparent.

However, as per Site Visit and Remote Audit Requirements And Procedures version 2.0 dated on 30/05/2023, once site visit within every three years after the first physical site visit date is required. Then the verification team raised CAR-1 and only emission reductions within 3 years prior to the site visit date 17/10/2024 are claimed as per the Applicability of Minimum Site Visit Requirements By VVB published on 16/08/2021:

In case non-Force Majeure, the VVB shall not verify the monitoring period falling before three years of the site visit date. Under similar circumstances for GSCERs projects, CERs only for three years before the site visit date shall be labelled as GSCERs.

Therefore, the claimed emission reductions are verified as:

Period	Actual emission reductions
17/10/2021 to 31/12/2021	25,845tCO ₂ e
01/01/2022 to 31/12/2022	160,031tCO ₂ e
01/01/2023 to 12/05/2023	58,284tCO ₂ e
Total 01/03/2020 to 12/05/2023	244,160tCO ₂ e

[Double Counting]

By reviewing The Letter of Confirmation on Avoiding Double Counting /16/ provided by the PP, the verification team has confirmed that the GS Project has not claimed in the past or would not claim emission reductions under any other GHG program in future. The project is also not registered under I-REC Standard. IREC and other GHG registries including CDM, VCS, GCC, CCER, etc., are checked and it is confirmed that there is no doubt of double counting for the emission reductions during this monitoring period. Domestic national and regional ETS do not cover the project's industry, CDQ generation. The GSVERs of the project are not included within and counted under a regulated domestic climate mitigation target or NDC.

SDG outcome (net benefits for each SDG Impact)

According to the registered monitoring plan in GS-PDD and the approved transition documentation, the parameters which need to be monitored including:

(1) SDG 13: Climate Action

The verification approach of the impact of SDG13 is described above, and baseline emissions and project emissions are confirmed. Total emission reductions achieved during this monitoring period 01/03/2020 to 12/05/2023 were 511,858tCO₂e. Only emission reductions 244,160tCO₂e within 3 years prior to the site visit date 17/10/2024 are claimed as per the Applicability of Minimum Site Visit Requirements By VVB. Please refer to CAR-1.

(2) SDG 7: Affordable and Clean Energy

Affordable and Clean Energy supplied by the project during this monitoring period 01/03/2020 to 12/05/2023 were 333,046.02 MWh which was claimed for the period from 17/10/2021 because of the delay of the site visit, which is confirmed above. This parameter is the same as EG_{PJ,y}

(3) SDG 8: Decent Work and Economic Growth; Monitoring parameter: Number of employments and Level of income generation and Staff training

1. Quantitative employment

The verification team confirmed the data of quantitative employment throughout this monitoring period 01/03/2020 to 12/05/2023, as indicated in the monitoring report, by checking the documented evidence /19/ and onsite interview the staff of the project:

Vintage 01/03/2020 to 12/05/2023: 57 jobs created

The monitoring of this parameter is considered as acceptable.

2. Income Generation

Neijiang Statistic Yearbook 2023 (average wage) /20/ was checked and the average age of local areas is confirmed.

Through checking the evidence /19/ provided by the PP, and by the on-site interviews with the operational staffs, the verification team confirmed the information of salary of employees presented in the monitoring report /2/ is accurate.

Verification team compared the salary of the employees to the local average rate /20/, and can confirm that the salary of the employees keeps above the local average.

3. Staff training

Through checking the evidence /18/ provided by the PP, and by the on-site interviews with the operational staffs, the verification team confirmed the information of internal training provided by the project to the staff presented in the monitoring

	report /2/ is accurate.
	No CARs/CLs/FARs raised in this section.
Conclusion	Corresponding to the paragraph 374 of VVS-PA Version 03.0 and GS4GG, CCSC verification team confirms that: • A complete set of data for the monitoring period is available. • Information provided in the monitoring report has been cross-checked with other sources; • Calculations of baseline emissions, and project activity emissions and leakage, as appropriate, been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology document. • There are no assumptions in emission calculations. • Appropriate IPCC default values, GWPs and other reference values have been correctly applied.

E.8.2. Comparison of actual value of actual SDG Impacts with estimates in approved PDD

Means of verification	The comparison of actual values with estimates in registered PDD and the approved transition documentation has been checked and re-calculated by the verification team.
Findings	Based on the above assessment, the actual values from 01/03/2020 to 12/05/2023 is compared with the values estimated during the same period in the registered PDD /24/ and the approved transition documentation /25/ as follows:

	No.	Item	Values estimated in ex ante calculation of approved PDD	Actual values achieved during this monitoring period
	SDG 13	Climate Action	490,618 tCO ₂ e	511,858 tCO ₂ e 4.33% higher than that estimated during this monitoring period Only emission reductions 244,160tCO ₂ e within 3 years prior to the site visit date 17/10/2024 are claimed as per the Applicability of Minimum Site Visit Requirements By VVB. Please refer to CAR-1.
	SDG 7	Affordable and Clean Energy	669,081.6 MWh	698,178.616 MWh 4.35% higher than that estimated during this monitoring period Only 333,046.02 MWh within 3 years prior to the site visit date 17/10/2024 are claimed as per the Applicability of Minimum Site Visit Requirements By VVB. Please refer to CAR-1.
	SDG 8	Decent Work and Economic Growth	50 people employed and the income of staff is above local average salary level as per Transition Annex	57 staff employed with average salary of 56,208 CNY/y, 55,802 CNY/y, 55,807 CNY/y, 56,028 CNY/y respectively in vintage 2020, 2021, 2022 and 2023, higher than local average level, and 2, 3, 3, 1 trainings have been provided respectively in vintage 2020, 2021, 2022 and 2023.
No CARs/CLs/FARs raised in this section.				
Conclusion	CCSC can confirm that: A comparison of actual values of the GS project activity achieved during this monitoring period with the estimates in the registered PDD and approved transition documentation has been provided. The verification team considers the calculation of the comparison is correct.			

E.8.3. Remarks on increase in achieved SDG Impacts from estimated value in approved PDD

Means of verification	Remarks on increase in achieved SDG Impacts from estimated value in approved PDD are included in the section E.6 of the monitoring report.
Findings	SDG 13 and SDG 7-The verified Emission Reductions and supplied energy were about 4.33% or 4.35% higher than the estimated value in the monitoring period, which is slight and reasonable due to the coke production increase during this monitoring period. The VVB confirmed that the increase 4.33% of the emission reductions during this monitoring period doesn't impact the additionality. SDG 8- The salary for the employees in the power stations included in the project were all higher than local average salary level. Number of staff employed by the project were higher than expected in the registered PDD.
Conclusion	The actual GHG emission reductions and net electricity generation are 14% higher than the estimates in the registered PDD and the approved transition documentation. The PP has provided the reasonable cause of increase in the actual GHG emission reductions. Trainings have been provided respectively in vintage 2020, 2021, 2022 and 2023.

E.8.4. Actual GHG emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Means of verification	As the current monitoring period is from 01/03/2020 to 12/05/2023, which the start date is after 31/12/2012. Thus, it is not applicable.
Findings	N/A
Conclusion	N/A

E.9. Assessment of reported sustainable development co-benefits

Means of verification	The CCSC verification team has checked against the GS-MR submitted by the project participants (PP) and interviewed with PP, and confirms that they have not monitored the sustainable development co-benefits of the registered GS project activity, and not requested the VVB to verify them. Therefore, the assessment of reported sustainable development co-benefits for the Project is not applicable.
Findings	N/A
Conclusion	N/A

E.10. Global stakeholder consultation

Means of verification	During the on-site inspection and the stakeholders' interview, the verification team did not receive any authentic and relevant comments from the local stakeholders. Therefore, the global stakeholder consultation is not applicable in this verification period.
Findings	N/A
Conclusion	N/A

SECTION F. Internal quality control

>>

CCSC has taken the following quality control measures within the verification team and of the verification process according to relevant CCSC's internal procedures:

- The application review of the verification was conducted and concluded that CCSC has the accredited scope and competence to verify the Project with impartiality as well;
- The verification team was selected with due considerations given in terms of the competence and impartiality;
- The verification team carried out the verification work and compiled a verification report strictly following CCSC's Procedures for Implementation of Verification.

The verification report submitted by the verification team was subjected to a technical review and decision-making process, the technical reviewers and decision-makers are qualified and independent from the verification team. If any issue is raised during technical review and/or decision-making the same is to be discussed between the issue-raiser and the team leader as well as the PP. All issues must be satisfactorily addressed before the submission of the report for final approval. The persons who conducted the technical review and decision-making for the Project are shown in section B.2 this report and their Certificates of Competence can be found in Appendix 2 of this report.

The report approved by the authorized official of CCSC as the final report together with relevant documents are submitted to Gold Standard for request for issuance (only if an unconditioned positive verification/certification opinion is concluded).

SECTION G. Verification opinion

>>

The verification team assigned by the China Classification Society Certification Co., Ltd. (CCSC) concludes that the GS Project “The CDQ Project in Tranvic Group”, as described in the monitoring plan contained in the registered PDD version 04, the approved transition documentation and Monitoring Report (version 3.0,06/11/2024), meets all relevant requirements of the GS project activities including article 12 of the Kyoto Protocol, the modalities and procedures for CDM and the subsequent decisions by the COP/MOP and CDM Executive Board and Gold Standard. The verification is conducted in line with the VVS requirements and GS4GG requirements.

The verification was executed by taking the following methods and in the following steps so far:

- Desk review of MR (Version 1.0, 22/09/2024) /1/ and relative documents
- On-site survey inspection and interviews (17/10/2024)
- Raise corrective action requests (CARs) and clarification requests (CLs)
- Desk review of revised MR (Version 3.0,06/11/2024) /2/ and responses to CARs and CLs
- Issue of this version of the verification report

The Project is implemented according to selected monitoring methodology and the monitoring plan contained in the registered PDD and the approved transition documentation. The monitoring equipment was installed, calibrated and maintained in a proper manner. The monitoring system is in place and the Project is generating GHG emission reductions as a GS project. No legal contest has arisen during MP.

CCSC therefore issues the positive verification opinion expressed in the Certification statement in SECTION H.

SECTION H. Certification statement

>>

CCSC has carried out the 4th periodic verification of the Project “The CDQ Project in Tranvic Group” (2460). This verification covers the period from 01/03/2020 to 12/05/2023 (first and last days included).

In the course of the verification, 3 Corrective Action Request (CAR) and 3 Clarification Request (CL) were raised. The verification team also did not raise any Forward Action Request (FAR). The verification is based on the MR (Version 1.0), the revised MR (Version 3.0), the registered PDD and the registered validation form, the verification reports for the previous monitoring periods, the approved transition documentation, Emission Reductions Calculation Spreadsheet, and supporting documents available to CCSC.

As the result of the 4th periodic verification, CCSC confirms that:

- The GS project activity has been implemented and operated as per the registered PDD, the approved transition documentation and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place;
- The monitoring report and other supporting documents provided are complete in accordance with the latest applicable version of the completeness checklist for requests for issuance of VERs and in accordance with applicable CDM and GS requirements;
- The actual monitoring systems and procedures are in place and functional, and comply with the monitoring systems and procedures described in the monitoring plan of the registered PDD and the approved transition documentation;

- The monitoring plan is in accordance with the applied methodology, i.e. ACM0012 Version 04.0.0;
- The installed equipment for measuring parameters required for calculating emission reductions are calibrated appropriately.
- The GHG emission reductions are calculated without material omission, errors, misstatements and in a conservative and appropriate manner.

CCSC hereby certifies that the Project has achieved total amount of certified SDG impact (as per approved methodology) achieved in this monitoring period as follows:

SDG 13	Climate Action in this monitoring period (01/03/2020 to 12/05/2023)	511,858 tCO ₂ e However, only emission reductions 244,160tCO ₂ e within 3 years prior to the site visit date 17/10/2024 are claimed as per the Applicability of Minimum Site Visit Requirements By VVB. Please refer to CAR-1.
SDG 7	Affordable and Clean Energy in this monitoring period	333,046.02 MWh
SDG 8	Decent Work and Economic Growth in this monitoring period	57 staff employed with average salary of 56,208 CNY/y, 55,802 CNY/y, 55,807 CNY/y, 56,028 CNY/y respectively in vintage 2020, 2021, 2022 and 2023, higher than local average level, and 2, 3, 3, 1 trainings have been provided respectively in vintage 2020, 2021, 2022 and 2023.

Appendix 1. Abbreviations

Abbreviations	Full texts
BE	Baseline emissions
CAR	Corrective Action Request
CCSC	China Classification Society Certification Co., Ltd.
CDM	Clean Development Mechanism
CL	Clarification request
CO ₂	Carbon dioxide
DOE	Designated operational entity
DNA	Designated National Authority
EB	Executive Board
ER	Emission reduction
FAR	Forward action request
GHG	Greenhouse gas(es)
GS	Gold Standard
GS4GG	Gold Standard for the Global Goals
IPCC	Intergovernmental Panel on Climate Change
LE	Leakage emissions
MP	Monitoring Plan
MR	Monitoring report
NGO	Non-governmental Organization
PCP	Project Cycle Procedure
PDD	Project Design Document
PP	Project Participant
PS	Project Standard
SDGs	Sustainable Development Goals
tCO ₂ e	Tonne of carbon dioxide equivalent
UNFCCC	United Nations Framework Convention on Climate Change
VVB	Validation/Verification Body
VVS-PA	CDM Validation and Verification Standard for Project Activity

Appendix 2. Competence of team members and technical reviewers

CHINA CLASSIFICATION SOCIETY CERTIFICATION CO., LTD.

04.05.2018 - Validation & Verification Body

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ADDRESS	TELEPHONE	CONTACT EMAIL
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APPROVED AUDITORS	SCOPES	ACCREDITATION SCOPE
Li Xingtong	Community Services Activities	1. Energy industries (renewable - / non-renewable sources)
Yang Ding		2. Energy distribution
Ruyun Liu	Energy and waste	3. Energy demand
Cheng Liang		4. Manufacturing industries
Culling Meng	Transport (Energy efficiency in the Transport sector)	5. Chemical industry
Qiuyan Li		6. Construction
Chen Wang		7. Transport
	Renewable Energy Labelling	8. Mining/Mineral production
		9. Metal production
	Gold Standard micro-scale	10. Fugitive emissions from fuels (solid, oil and gas)
	Gold Standard for Sustainable Urban	11. Waste handling and disposal

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
/1/	PP	Monitoring Report for The CDQ Project in Tranvic Group for 4th monitoring period, Monitoring Report Version 1.0 dated 22/09/2024	Version 1.0 dated 22/09/2024	PP
/2/	PP	Monitoring Report for The CDQ Project in Tranvic Group for 4th monitoring period, version 3.0	Version 3.0, dated 06/11/2024	PP
/3/	PP	Emission Reductions Calculation Spreadsheet	/	PP
/4/	PP	Line diagrams of power connection system	/	PP
/5/	PP	Operation log during the monitoring period	/	PP
/6/	PP	Daily Settlement Data for Unit Consumption	/	PP
/7/	PP	Monthly energy consumption sheet of the coking plant	/	PP
/8/	PP	Daily records of electricity supplied by the 10kV backup line	/	PP
/9/	PP	Monthly settlement for electricity supplied by the 10kV backup line	/	PP
/10/	Government	China Electric Power Statistical Yearbook 2023	/	PP
/11/	PP	Nameplates of the main equipments	/	PP
/12/	Calibrator: Sichuan P.R. China Chuanwei Group of Measurement and Testing	Calibration reports	/	PP
/13/	Sichuan Neijiang Quality and Technical Supervision Bureau	Calibration certification of the calibrator authorized by Sichuan Neijiang Quality and Technical Supervision Bureau	26/06/2018 to 08/06/2023	PP
/14/	Industrial standards	Technical administration code of electricity energy metering (DL/T 448-2016)	/	PP
/15/	Industrial standards	Verification regulation of Electrical Meters for Measuring Alternating-current Electrical Energy (JJG596-2012)	/	PP
/16/	PP	Letter of Confirmation on Avoiding Double Counting	25/10/2024	PP
/17/	PP	Monitoring & Management Manual	/	PP
/18/	PP	Internal training records	/	PP
/19/	PP	Payroll records	/	PP
/20/	Government	Neijiang Statistic Yearbook 2023 (average wage)	/	PP
/21/	PP	Dust removal system operation log during this monitoring period	/	PP
/22/	PP	Coke production records	/	PP
/23/	PP	Grievance Expression Process Book	/	PP

/24/	PP	GS-Project Design Document for The CDQ Project in Tranvic Group, version 04 dated 20/03/2014	Version 04 dated 20/03/2014	PP
/25/	PP	Transition documentation for the project activity The CDQ Project in Tranvic Group	/	PP
/26/	URS	Gold Standard Validation Form for The CDQ Project in Tranvic Group (GS ID: 2460) Version 03.0	22/01/2017	PP
/27/	PP	Monitoring Reports and verification reports for The CDQ Project in Tranvic Group of the previous monitoring periods.	/	PP
/28/	UNFCCC	ACM0012 Version 04.0.0 Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects	/	Others
/29/	UNFCCC	Validation and Verification Standard Version 03.0 dated 09/09/2021	/	Others
/30/	UNFCCC	Project Standard Version 03.0 dated 09/09/2021	/	Others
/31/	UNFCCC	Project Cycle Procedure Version 03.0 dated 09/09/2021	/	Others
/32/	GS	Gold Standard for the Global Goals (GS4GG) Monitoring report form, Version 1.1 dated 14/10/2020	Version 1.1 14/10/2020	Others
/33/	GS	GS4GG Principles & Requirements Version 1.2, dated 24/10/2019	Version 1.2 24/10/2019	Others

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. Remaining FAR from validation and/or previous verifications

FAR ID	N/A	Section no.	N/A	Date: N/A
Description of FAR				
N/A				
Project participant response				Date: N/A
N/A				
Documentation provided by project participant				
N/A				
VVB assessment				Date: N/A
N/A				

Table 2. CL from this verification

CL ID	CL-1	Section no.	E.3	Date: 24/10/2024
Description of CL				
Project representative and host country in the KEY PROJECT INFORMATION of cover page of the monitoring report are incorrect.				
Project participant response				Date: 28/10/2024
Project representative and host country in the KEY PROJECT INFORMATION of cover page has been corrected in the revised monitoring report.				
Documentation provided by project participant				
Revised monitoring report.				
VVB assessment				Date: 29/10/2024
Revision was confirmed. This CL is closed out.				

CL ID	CL-2	Section no.	E.4.3	Date: 24/10/2024
Description of CL				
It is to be clarified whether the project changed the start date of the crediting period.				
Project participant response				Date: 28/10/2024
The start date of the crediting period has not been changed after it has been registered as a GS project. Monitoring report was revised accordingly.				
Documentation provided by project participant				
Revised monitoring report.				

VVB assessment				Date: 29/10/2024
The start date of the crediting period is confirmed consistent with the transition annex of the project. Revision was confirmed. This CL is closed out.				
CL ID	CL-3	Section no.	E.6.2	Date: 24/10/2024
Description of CL				
Latest available local average salary level sourced from the Neijiang Statistic Yearbook 2024 should be used for comparison to the monitoring parameter, staff income generation.				
Project participant response				Date: 28/10/2024
As of the present day, we have only found the statistical yearbook for 2023 of Neijiang City, with statistical data of 2020 to 2022 included, so we will use the local average salary level from it as the source to the monitoring parameter, staff income generation. Since statistical data of 2023 is not available, statistical data of 2022 is used for the comparison of actual income rate of 2022.				
Documentation provided by project participant				
/				
VVB assessment				Date: 29/10/2024
Public source from the website of the Neijiang Government (https://www.neijiang.gov.cn/) has been checked and confirmed that there is only Neijiang Statistic Yearbook 2023 which is the latest local statistic data of the year 2022 for reference, while the Neijiang Statistic Yearbook 2024 was not published yet. Therefore the verification team confirmed that it is appropriate for the PP to use local statistic data of the year 2022 for comparison to the monitoring parameter, staff income generation.				
This CL is closed out.				

Table 3. CAR from this verification

CAR ID	CAR-1	Section no.	D.2	Date: 24/10/2024
Description of CAR				
As per the GS rule Site Visit And Remote Audit Requirements And Procedures version 2.0 published on 30/05/2023 (section 3.1), frequency of physical site visits should be performed once within every three years after the first physical site visit date. However the gap between the previous VVB (CTI) site visit 30/09/2020 and this verification 17/10/2024 is longer than 3 years.				
Project participant response				Date:
PP only claim 244,160 tCO ₂ from 17/10/2021 to 12/05/2023 for this monitoring period.				
Documentation provided by project participant				
Revised monitoring report and ER spreadsheet				
VVB assessment				Date:
The verification team confirmed that only emission reductions within 3 years prior to the site visit date 17/10/2024 are claimed. This CAR is closed.				

CAR ID	CAR-2	Section no.	E.6.2	Date: 24/10/2024
Description of CAR				

Monitoring results of the electricity parameters $EG_{PJ,y}$, $EG_{PJ,j,y}$, $Q_{OE,y}$ of the period 01/05/2024 to 12/05/2023 are not consistent with the documented evidence.	
Project participant response	Date: 28/10/2024
Monitoring results of the electricity parameters $EG_{PJ,y}$, $EG_{PJ,j,y}$, $Q_{OE,y}$ of the period 01/05/2024 to 12/05/2023 have been revised in the monitoring report and emission reduction calculation spreadsheet according to the evidence including Daily Settlement Data for Unit Consumption /6/, Monthly energy consumption sheet of the coking plant /7/, Daily records of electricity supplied by the 10kV backup line /8/ and Monthly settlement for electricity supplied by the 10kV backup line /9/. Emission reductions have been recalculated accordingly.	
Documentation provided by project participant	
Revised monitoring report and emission reduction calculation spreadsheet	
VVB assessment	Date: 29/10/2024
Revision was checked and confirmed. This CAR is closed out.	

CAR ID	CAR-3	Section no.	E.6.2	Date: 24/10/2024
Description of CAR				
Monitored data of the $TDL_{j,y}$ should be updated with latest available sources. Emission reductions have to be revised accordingly.				
Project participant response				Date: 28/10/2024
Latest available data of the year 2020-2022 of the public official data form China Electric Power Statistical Yearbook 2023 is used in ER calculation. Since the value of this parameter is unavailable currently, the maximum value among the year 2020-2022 is applied for the year 2023 for conservative purpose.				
Documentation provided by project participant				
Revised monitoring report and emission reduction calculation spreadsheet				
VVB assessment				Date: 29/10/2024
Revision was checked and confirmed. This CAR is closed out.				

Table 4. FAR from this verification

FAR ID	N/A	Section No.	N/A	Date: /
Description of FAR				
N/A				
Project participant response				Date: /
N/A				
Documentation provided by project participant				
N/A				
VVB assessment				Date: /
N/A				