

Verification report form for GS project activities	
VERIFICATION REPORT	
Title of the project activity	The CDQ Project in Tranvic Group
Reference number of the project activity	GS ID: 2460 TN P-No. : 8000465131 – 16/149
Version number of the Verification report	1.0
Completion date of the Verification report	14/11/2016
Monitoring period number and duration of this monitoring period	MP 2 nd 10/03/2014-31/05/2016 (Including both days)
Version number of monitoring report to which this report applies	02
Crediting period of the project activity corresponding to this monitoring period	fixed crediting period 13/05/2013 to 12/05/2023
Project participant(s)	Neijiang Bowei Xinyu Chemical Industry Co., Ltd. Carbon Invcap International Trading Co., Ltd.
Host Party	China
Sectoral scope(s), selected methodology(ies), and where applicable, selected standardized baseline(s)	Scope: 1 / Technical area: 1.1 Scope: 4 / Technical area: 5.1 CDM Methodology: ACM0012 "Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects" (version 04.0.0)
Estimated GHG emission reductions or net anthropogenic GHG removals for this monitoring period in the registered PDD	342,165 tCO ₂ e
Certified GHG emission reductions or net anthropogenic GHG removals for this monitoring period	230,021 tCO ₂ e
Name of DOE	TÜV NORD CERT GmbH
Name, position and signature of the approver of the Verification report	 Alexandra Nuske Final Approver

SECTION A. Executive summary

Beijing Carbon Invcap International Carbon Assetment Management Co., Ltd. has commissioned the TÜV NORD JI/CDM Certification Program to carry out the Gold Standard(GS) 2nd periodic verification of the project:

“The CDQ Project in Tranvic Group”

with regard to the relevant Gold Standard requirements.

This verification covers the period from 10/03/2014 to 31/05/2016 (including both days).

Via on-site investigation, it is confirmed the project activity involves the installation one set of 170t/h CDQ system with a capacity of 30MW steam turbine/generator unit to recover the waste heat, which is consistent with the registered PDD^{/PDD/}. The Verification Team has checked the nameplate of steam turbine and generator^{/PHT/} and technical agreement of the equipments^{/TP/}, and is able to confirm that the key technical specifications of steam turbine and generator employed by the project activity are fully consistent with the relevant information described in the registered PDD.

The electricity power generated by the project activity is for captive use. Moreover, the Verification Team has verified the location of the installed equipment and also checked the metering system, found that the installed equipment and metering system are in place and fully consistent with the registered PDD.

The project construction starting date is 01/06/2012, which has been confirmed in the registered Validation Report^{/VAL/}; the project was put into commissioning since 13/05/2013, which has been confirmed via checking the Daily Handing Over Record^{/DHOR/} against the previous verification report^{/VER/}.

As part of the site visit the Verification Team was able to confirm that the project implementation is in accordance with the project description contained in the registered PDD.

The project was registered as a GS-VER project on 10/03/2014 with the registration number of GS2460. According to the registered PDD, the project participant has adopted for the fixed crediting period of 10 years with the start date of 13/05/2013.

Details of the project location are given in table A-1 below:

Table A-1: Project Location

No.	Project Location
Host Country	China
Region:	Sichuan Province
Project location address:	Lianjie town, Weiyuan county, Neijiang city
Latitude:	29°43'11" N
Longitude:	104°29'05" E

Basic technical details of the project are summarized in table A-2.

Table - A-2: Technical data of the project activity

Parameter	Unit	Value
Waste Heat Boiler		
Type	-	Q270/970-108.3-9.8/540

Parameter	Unit	Value
Capacity	t/h	108.3
Unit	-	1
Operational Life	year	20
Manufacturer	-	Hangzhou Boiler Group Co., Ltd.
Steam Turbine		
Model	-	Condensing
Type	-	N30-8.83
Unit	-	1
Rated Capacity	MW	30
Rated Speed	r/min	3,000
Manufacturer	-	Qingdao Jieneng Steam Turbine Group Co., Ltd.
Generator		
Type	-	QF ₂ W-30-2
Unit	-	1
Rated Capacity	MW	30
Rated voltage	kV	10.5
Rated frequency	Hz	50
Rated Power factor	-	0.8
Manufacturer	-	Dongfang Electric Consortium Dongfeng Electric Machinery Co., Ltd.

As a result of this verification, the verifier confirms that:

- all operations of the project are implemented and installed as planned and described in the validated project design document.
- the monitoring plan is in accordance with the applied approved CDM methodology, i.e., ACM0012 ver. 04.0.0
- the installed equipment essential for measuring parameters required for calculating emission reductions are calibrated appropriately.
- the monitoring report is in accordance with the relevant GS requirements^{/GSR/}.
- the project contributes to sustainability development
- the monitoring system is in place and functional. The project has generated GHG emission reductions.

As the result of the GS 2nd periodic verification, the verifier confirms that the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner. TÜV NORD JI/CDM CP herewith confirms that the project has achieved emission reductions in the above mentioned reporting period as follows:

Emission reductions: 230,021 t CO₂e

SECTION B. Verification team, technical reviewer and approver

B.1. Verification team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk review	On-site inspection	Interview(s)	Verification findings
1.	Team Leader (also verifier)	EI	ZHAO	Xuejiao	-	x	x	x	x
2	Team Member (Technical Expert)	OR	Wu	Jianmin	-	x	x	x	x

B.2. Technical reviewer and approver of the Verification report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Winter	Rainer	TN CERT GmbH
2	Technical reviewer / Approver	IR	Nuske	Alexandra	TN CERT GmbH

SECTION C. Means of verification

C.1. Desk review

During the desk review all documents initially provided by the client and publicly available documents relevant for the verification were reviewed. The main documents are listed below:

- the registered PDD including the monitoring plan^{/PDD/},
- the registered GS validation report^{/VAL/},
- the registered GS Passport^{/GSP/},
- documentation of previous verification^{/VER/},
- the monitoring report, including the claimed emission reductions for the project^{/MR/},
- the emission reduction calculation spreadsheet^{/XLS/}.

Other supporting documents, such as publicly available information on the Gold Standard website and background information were also reviewed.

C.2. On-site inspection

Duration of on-site inspection: 10/10/2016-11/10/2016				
No.	Activity performed on-site	Site location	Date	Team member
1.	Opening meeting	Neijiang Bowei Xinyu Chemical Industry Co., Ltd., Lianjie town, Weiyuan county, Neijiang city, Sichuan Province, P.R. China	10/10/2016	Zhao Xuejiao Wu Jianmin
2	On-site inspection Interview with PP Representative and Operation Staff	Neijiang Bowei Xinyu Chemical Industry Co., Ltd., Lianjie town, Weiyuan county, Neijiang city, Sichuan Province, P.R. China	10/10/2016	Zhao Xuejiao Wu Jianmin
3	Documents check	Neijiang Bowei Xinyu Chemical Industry Co., Ltd., Lianjie town, Weiyuan county, Neijiang city, Sichuan Province, P.R. China	11/10/2016	Zhao Xuejiao Wu Jianmin
4	Finding Summary	Neijiang Bowei Xinyu Chemical Industry Co., Ltd., Lianjie town, Weiyuan county, Neijiang city, Sichuan Province, P.R. China	11/10/2016	Zhao Xuejiao Wu Jianmin
5	Close Meeting	Neijiang Bowei Xinyu Chemical Industry Co., Ltd., Lianjie town, Weiyuan county, Neijiang city, Sichuan Province, P.R. China	11/10/2016	Zhao Xuejiao Wu Jianmin

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Zhao ^{/1/}	Bin	Technology Center of Tranvic Group	10/10/2016-11/10/2016	- General aspects of the project - Changes since validation / previous verifications	Zhao Xuejiao Wu Jianmin

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
			/CDM Office Vice Director		- Calibration procedures - Power generation situation - Quality management system - Involved personnel and responsibilities - Training and practice of the operational personnel - Implementation of the monitoring plan - Monitoring data management - Data uncertainty and residual risks - Procedural aspects of the verification - Maintenance - Environmental aspects	
2	Zou ^{/11/}	Hongxiu	Neijiang Bowei Xinyu Chemical Industry Co., Ltd. /Financial Manager	10/10/2016-11/10/2016	- General aspects of the project - Changes since validation / previous verifications - Calibration procedures - Power generation situation - Quality management system - Involved personnel and responsibilities - Training and practice of the operational personnel - Implementation of the monitoring plan - Monitoring data management - Data uncertainty and residual risks - Procedural aspects of the verification - Maintenance - Environmental aspects	Zhao Xuejiao Wu Jianmin
3	Li ^{/11/}	Xi	Neijiang Bowei Xinyu Chemical Industry Co., Ltd. /Project Manager	10/10/2016-11/10/2016	- General aspects of the project - Changes since validation / previous verifications - Calibration procedures - Power generation situation - Quality management system - Involved personnel and responsibilities - Training and practice of the operational personnel - Implementation of the	Zhao Xuejiao Wu Jianmin

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
					monitoring plan - Monitoring data management - Data uncertainty and residual risks - Procedural aspects of the verification - Maintenance - Environmental aspects	
4	Zhang ^{/12/}	Liang	Lianjie town local Resident	10/10/2016-11/10/2016	- Job opportunities - Air quality - Water quantity - Dust collection calculation - Continues Input/Grievance Mechanism issue	Zhao Xuejiao Wu Jianmin
5	Zhou ^{/12/}	Hong	Lianjie town local Resident	10/10/2016-11/10/2016	- Job opportunities - Air quality - Water quantity - Dust collection calculation - Continues Input/Grievance Mechanism issue	Zhao Xuejiao Wu Jianmin
6	Shi ^{/12/}	Xiaoming	Lianjie town local Resident	10/10/2016-11/10/2016	- Job opportunities - Air quality - Water quantity - Dust collection calculation - Continues Input/Grievance Mechanism issue	Zhao Xuejiao Wu Jianmin
7	Zhao ^{/12/}	Kang	Lianjie town local Resident	10/10/2016-11/10/2016	- Job opportunities - Air quality - Water quantity - Dust collection calculation - Continues Input/Grievance Mechanism issue	Zhao Xuejiao Wu Jianmin
8	Zheng ^{/13/}	Zhaoning	Goldchina Consultancy International Co., Ltd	10/10/2016-11/10/2016	- Monitoring plan - Monitoring training - Emission reduction calculation	Zhao Xuejiao Wu Jianmin

During the site visit, the objective observer has randomly selected local stakeholders^{/12/} to confirm that the correctness of the parameters reported by the PP and also to check whether Continues Input/Grievance Mechanism has been working during the monitoring period.

The asked questions were based on requirements of the Annex I, Rules, the Toolkit to the Gold Standard version 2.2^{/GST/} and the Annex-W for the Continuous Input/Grievance mechanism. The questions asked were basically based on requirements of the Annex I, Rules and Toolkit to the Gold Standard version 2.2^{/GST/}. The main topics included, but not limited to, the followings:

- Air quality - Water sprinkling, dust remove
- Water quantity - Water consumption reduction and rate

- Quantitative employment and income generation - Employment records, job opportunities, salary levels
- Quality of employment – Training records
- Other pollutants - Solid waste treatment, comprehensive utilization
- Communication with the PP - Continuous Input/Grievance Mechanism^{/CIGMB/}.

A summary of interview questions and feedback received are presented in the below table:

SD indicator	Questions for stakeholders during the site interviews	Summary of feedback
Air quality	1. Do you think the Water had been sprayed during the construction period?	Project Owner: Water had been sprayed during the whole construction period. Frequency was about 2 to 4 times a month. Record of spray water was prepared and achieved. Local Stakeholder: No impacts on local air quality.
	2. Do you think the air quality is better?	Project Owner: Dust remove system was effectively operated, which significant reduce the dust emission.what's more, CDQ system did not emission those chemical pollutant emission incurred by wet coke quenching,such as benzene,pyrene and phenol etc, so the the coking odor was mitigated significantly. Local Stakeholder: The air quality around the production area become better, the dust in the air has been reduced greatly, the coking odor was mitigated significantly.
Water quantity	3. Do you think the water quantity have been reduced against the CWQ?	Project Owner: With the implementation of the project, more than 1 Million ton water were effectively saved Local Stakeholder: No impacts on local water quantity. The fog due to CWQ was disappeared.
Quality of employment	4. Do you think sufficient trainings have been provided to the staff?	Project Owner: The staffs have accepted a series of training on the plant operation, safety, monitoring, environment protection, emergency, maintenance, which contributes to the quality of employment. The training records was prepared and achieved. Interviewed staff: All the staff have confirmed receiving the relevant trainings.
Quantitative employment and income generatio	5. Do you think that this project offers opportunities for employment?	Project Owner: Creating 57 long term work positions for local people during operational period. Local Stakeholder: All workers of the project are from local residents.
	6. How about the income level of the staff?	Project Owner: The average salary of employees is about 38,276 CNY/y. Local Stakeholder: The salary level is higher than local average level.
Other pollutants	7. How to deal with the dust collected from the CDQ project?	Project Owner: The dust collected was sent for comprehensive utilization such as using as the raw material for sintering. No secondary pollution occurred.

SD indicator	Questions for stakeholders during the site interviews	Summary of feedback
-	8. How do you communicate your questions or comments to the PP?	The personnel of the project organize public meetings and always is possible to communicate directly with the designated personnel of the project.

Verification Team along with onsite observation, objective evidence collections, data generation and recording analysis also considered the views obtained in these interviews while arriving at Verification Opinion.

C.4. Sampling approach

D.4.1 Sampling during monitoring

☒	No sampling approach has been used by the PP to determine the monitored parameters				
☐	A sampling approach has been taken for the following monitored parameter(s):				
	Parameter	Sampling approach ¹⁾	Sampling Type ²⁾	Population	Sample Size

¹⁾ Sampling Approaches:

SiRS: Simple Random Sampling
StRS: Stratified Random Sampling
SS: Systematic Sampling
CS: Cluster Sampling
MSS: Multi-stage Sampling

²⁾ Sampling Types:

PS: Parameter Sampling

D.4.2 Sampling approaches during verification

☒	No sampling approach has been used by the VT to verify the monitored parameters				
☐	A sampling approach has been applied by the VT for the following monitored parameter(s):				
	Parameter	Sampling approach ¹⁾	Sampling Type ²⁾	Population	Sample Size

¹⁾ Sampling Approaches:

SiRS: Simple Random Sampling
StRS: Stratified Random Sampling
SS: Systematic Sampling
CS: Cluster Sampling
MSS: Multi-stage Sampling

²⁾ Sampling Types:

AS: Acceptance Sampling
PS: Parameter Sampling
COM: Full data check at higher data aggregation levels and sampling at original data levels

C.5. Clarification requests, corrective action requests and forward action requests raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form (D.1)	-	3	-
Compliance of the project implementation with the registered PDD (D.3)	-	1	-
Post-registration changes (D.4)	-	-	-
Compliance of the monitoring plan with the monitoring methodology including applicable tool and standardized baseline (D.5)	2	-	-
Compliance of monitoring activities with the registered monitoring plan (D.6)	-	1	-
Compliance with the calibration frequency requirements for measuring instruments (D.7)	-	-	-
Assessment of data and calculation of emission reductions or net removals (D.8)	-	1	-
Others (please specify)	-	-	-
Total	2	6	-

SECTION D. Verification findings

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

Means of verification	A draft monitoring report was submitted to the verification team by the project participants. This report was made publicly available prior to the start of the verification activities. By means of the UNFCCC website it has been checked the latest applicable MR template CDM-MR-FORM has been used. Further it has been checked whether the latest instructions for filling out the MR template have been followed. Every section has been checked against the respective guidance and GS requirements. The following sources of information have been used in this context: • /MR/ • /MRF/ • /unfccc/ • /GSR/	
Findings	☒	The latest reporting template CDM-MR-FORM as listed on the UNFCCC website has been used for the Monitoring Report to be uploaded.
	☒	The latest instructions for filling out the MR have been followed. No adverse finding has been identified in the course of this verification.
	☒	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context:
		- CAR 1 & CAR 2 & CAR 3
Conclusion	☐	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	☒	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	A draft monitoring report was submitted to the verification team by the project participants. This report was made publicly available prior to the start of the verification activities. During the verification, mistakes and needs for clarification were identified. The PP has carried out the requested corrections so that it can be confirmed that the Monitoring report is complete and transparent and in accordance with the latest approved PDD, other relevant requirements as well as with the applicable monitoring report form.	

D.2. Remaining forward action requests from validation and/or previous verification

During the validation the validating DOE might have raised issues that could not be closed or resolved during the validation stage. For this purpose FARs might have been raised. Likewise FARs might have been raised in the course of previous verifications.

In the course of this verification the registered PDD^{/PDD/} and the previous verification report ^{/VER/}, where applicable, have been checked in order to identify any remaining forward action requests. For the current monitoring period the following applies:

(i) Open issues from validation:

☒	There were no open issues which have been addressed in the latest version of the validation report.
☐	All open issues from the validation have been appropriately addressed in the context of previous verifications.
☐	All issues related to the validation have been appropriately addressed in the course of the current monitoring period (for details please refer to Appendix 4)
☐	The following issues related to the validation have not yet been appropriately addressed (for details please refer to Appendix 4):
	- N/A

(ii) Open issues from previous verifications:

☐	N/A – as this is the first monitoring period for this GS project activity.
☒	There were no open issues which have been addressed in the previous verification report
☐	All issues related to the previous verification have been appropriately addressed in the course of the current monitoring period (for details please refer to Appendix 4)
☐	The following issues related to the previous verification have not yet been appropriately addressed (for details please refer to Appendix 4):
	- N/A

D.3. Compliance of the project implementation with the registered project design document

Means of verification	By means of an in-depth review of the PDD in its latest form – as downloaded from the UNFCCC project site - and the checks carried out during the on-site visit an assessment has been carried out whether the project has been implemented and operated in line with the registered PDD and whether all physical features of the project are in place. The following has been checked: implemented technology, project equipment as well as monitoring and metering equipment. Further is has been checked if relevant technical equipment of the project activity has been exchanged or modified during the monitoring period and consistent notations of key equipment (meters etc.) in PDD, MR and calculation spreadsheet are applied. Interviews with operational personnel^{/1/} have been carried out, QMS records, maintenance records, instrument specifications were checked in this context. Special focus has further been laid to determine whether a potential phase wise implementation has occurred within the crediting period or any delays with respect to the starting dates have occurred. The following sources of information have been used in this context: • /PDD/ • /MR/ • /GSR/ • /GST/ • /XLS/ • /QAQC/ • /CAL/ • /unfccc/
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Findings	☒	The project has been implemented as described in the latest version of the PDD as well as in section B.1 of the monitoring report. No deviations thereof have been identified in the course of this verification.
	☐	The following deviations from the registered / approved project design and or the project description in the MR have been identified in the course of this verification (for further details please refer to section D.4): - N/A
	☒	In this context the following CARs, CLs have been raised: - CAR 4
	<i>In case of phased implementation:</i>	
	☒	N/A
	☐	The phased implementation has correctly and in sufficient detail been described in the latest version of the PDD.
	☐	The description in section 3.1 of the MR differs in content or the level of detail from the latest version of the PDD. However, the description in the MR is correct and reflects the situation during the site inspection.
	☐	The project description in the PDD/MR is not deemed sufficient. The detailed implementation timeline is as follows: N/A
Conclusion	☐	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	☒	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	During the verification a site visit was carried out. On the basis of this site visit and the reviewed project documentation it can be confirmed that w.r.t. the realized technology, the project equipment, as well as the monitoring and metering equipment, the project has been implemented and operated as described in the registered PDD.	

D.4. Post-registration changes

- ☒ By means of site visit, document check and interview it could be verified that the project is implemented and operated in line with the registered PDD and the applied methodology.
- ☐ Post registration changes have been identified and are assessed in detail in the subsequent steps D.4.1 to D.4.7.

D.4.1. Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline

It has been checked whether Temporary deviations from the registered monitoring plan (TDfrMP) or Temporary deviations from monitoring methodology or standardized baseline (TDfMM) have been applied during this monitoring period. The result is summarized in the table below.

☒	No Temporary deviations from the registered monitoring plan (TDfrMP) or Temporary deviations from monitoring methodology or standardized baseline (TDfMM).have been submitted to the GS prior to the current monitoring period.		
☐	The following TDfrMP or TDfMM have been approved or are under approval by the GS		
	1	Title	
		Status	☐ under approval; ☐ approved (approval No.:)
		Appr.date	
		Ref. No.	

	2	Title	
		Status	☐ under approval; ☐ approved (approval No.:)
		Appr.date	
		Ref.No.	
☒	During the verification of the current MP no need for a TDfrMP or TDfMM has been identified. The monitoring plan is in accordance with the approved methodology applied by the PA		
☐	An approval of the following TDfrMP or TDfMM is to be requested from the GS for the current MP as appendix 1 of the project standard does not apply. Please refer to the related PRC report submitted along with this issuance request for further details w.r.t. the assessment of the PRC.		
	1	Issue:	
	2	Issue:	
☐	The following TDfrMP or TDfMM for which appendix 1 of the PS is applicable have been applied:		
	1	Issue:	
	2	Issue:	

D.4.2. Corrections

It has been checked whether any corrections to project information or parameters fixed at validation have been approved during this monitoring period or submitted with this monitoring report. The result is summarized in the table below.

☒	During the verification of the current MP no need for corrections has been identified.		
☐	The following corrections have been applied:		
	1	Issue:	
	The PDD has been revised accordingly: (New) version No.: Revision date: XX/XX/XXXX		
	It is confirmed that the updated / corrected information is an accurate reflection of the actual project information and that the corrected parameters are in accordance with the applied methodology and the monitoring plan.		
	☐ A related post registration change has been submitted prior to the issuance request. The approval has been received on XX/XX/XXXX via approval number PRC-XXXX-00X. ☐ A related post registration change is submitted along with this issuance request. Please refer to the related PRC report submitted along with this issuance request for further details w.r.t. the assessment of the PRC.		

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

☒	N/A - as this is not the first verification within the crediting period
☐	The PPs do not intend to change the start date of the crediting period.
☐	As the change in the start date was below the related time period as indicated in PS § 277 and § 278 no prior approval was required but only a notification. This notification has been submitted by the PP without involvement of the DOE. The change and new start date has been checked from the related GSvproject webpage.

☐	The PPs intend to change the start date of the crediting period. As the intended change in start date beyond the related time period as indicated in PS § 279 prior approval by the Board is required. For detailed assessment of the change please refer to related PRC validation report. As per assessment in this report the DOE confirms that the change to the start date of the crediting period are in line with the related requirements of the VVS and PS.
☐	The approval to change the start date of the crediting period has been received on DD/MM/YYYY via approval number PRC-XXXX-00Z

D.4.4. Inclusion of a monitoring plan to a registered project activity

☒	N/A - as this monitoring plan was part of the registered PDD
☐	In line with PS § 281 or § 282 the PP has forwarded a monitoring plan to the DOE for validation. No prior approval of the monitoring plan was required as the PP in line with PS § 282 wished to submit the monitoring plan together with the request for issuance for the first monitoring period. Please refer to the related PRC report submitted along with this issuance request for further details w.r.t. the assessment of the PRC..
☐	In line with § 282 the PP submitted a monitoring plan prior to the submission of the request for issuance for validation to the DOE. A DOE has assessed the monitoring plan in line with related VVS requirements and submitted a related PRC report for prior approval. The approval has been received on DD/MM/YYYY via approval number PRC-XXXX-00Z.

D.4.5. Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline

It has been checked whether any permanent changes from the registered monitoring plan (PCfrMP) or applied methodologies (PCfMM) including standardized baselines (PCfSB) have been approved prior or during this monitoring period or submitted with this monitoring report. The result is summarized in the table below.

☒	No PCfrMP, PCfMM or PCfSB have been submitted to the GS prior to the current monitoring period		
☐	The following PCfrMP, PCfMM or PCfSB have been approved or are under approval by the UNFCCC		
	1	Title	Revised Monitoring Plan
		Status	☐ under approval; ☐ approved
		Appr.date	
		Ref. No.	N/A
	2	Title	Revised Monitoring Plan
		Status	☐ under approval; ☐ approved
		Appr.date	
Ref.No.		N/A	
☒	During the verification of the current MP no need for a PCfrMP, PCfMM or PCfSB has been identified. The monitoring plan is in accordance with the approved methodology applied by the PA		
☐	An approval of the following PCfrMP, PCfMM or PCfSB is to be requested from the EB for the current MP as appendix 1 of the project standard does not apply.		
	1	Issue:	
	2	Issue:	

☐	The following PCfrMP, PCfMM or PCfSB for which appendix 1 of the PS is applicable have been applied:	
	1	Issue:
	2	Issue:

D.4.6. Changes to the project design of a registered project activity

It has been checked whether any changes to the project design (CoPD) have been approved prior or during this monitoring period or submitted with this monitoring report. The result is summarized in the table below.

☒	No CoPD has been submitted to the GS prior to the current monitoring period		
☐	The following CoPD have been approved or are under approval by the GS		
	1	Title	
		Status	☐ under approval; ☐ approved
		Appr.date	
		Ref. No.	
	2	Title	
		Status	☐ under approval; ☐ approved
		Appr.date	
Ref.No.			
☒	During the verification of the current MP no need for a CoPD has been identified. The monitoring plan is in accordance with the approved methodology applied by the PA		
☐	An approval of the following CoPD.is to be requested from the EB for the current MP as appendix 1 of the project standard does not apply.		
	1	Issue:	
	2	Issue:	
☐	The following CoPD for which appendix 1 of the PS is applicable have been applied:		
	1	Issue:	
	2	Issue:	

D.4.7. Types of changes specific to afforestation and reforestation project activities

☒	N/A - as this monitoring plan was part of the registered PDD
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D.5. Compliance of monitoring plan with the monitoring methodology including applicable tool and standardized baseline

Means of verification	By means of comparison of the MR with (i) the applied CDM methodology (ii) all applicable CDM Meth tools and (iii) if applicable, a standardized baseline the verification team has checked whether the MP is in compliance with the MP related requirements of the applied methodology/tools/SB. The following sources of information have been used in this context:
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		• /MR/ • /ACM0012/ • /unfccc/		
Findings	☒	The MP is completely in accordance with the approved methodology applied by the GS project (last registered/approved version of the PDD)		
	☒	The breakdown of MP accordance of the referenced tools is as follows:		
		1	Title (of the tool)	Tool to calculate the emission factor for an electricity system
			Version	03.0.0
			MP compliance	☒ full compliance ☐ findings have been raised ☐ N/A (for MP)
		2	Title (of the tool)	Tool to calculate baseline, project and/or leakage emissions from electricity consumption
			Version	01
	MP compliance		☒ full compliance ☐ findings have been raised ☐ N/A (for MP)	
	☐	The breakdown of MP accordance of the applicable SB is as follows:		
		1	Title (of the SB)	Name of SB
Version				
☒	In this context the following CARs, CLs, FARs have been raised: - CL 1 & CL 2			
Conclusion	☐	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.		
	☒	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.		
	The monitoring plan complies with the applied methodology and the monitoring system and all applied procedures are completely in compliance to the latest approved monitoring plan and the methodology ACM0012 (version 04.0.0). The monitoring system and all applied procedures of sustainable development are completely in compliance to the registered Passport.			

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

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

Means of verification	By means of comparison of the MR and the ER calculation with the registered PDD the verification team has checked whether all parameters fixed ex-ante or at renewal of the crediting period have been applied correctly.			
	The parameters that are fixed ex ante are following:			
	Parameters	Source of data	Values applied	Demonstration by Verification team
	$EF_{grid,CM,y}$	Data from registered GS-PDD	0.7338 tCO ₂ e/MWh	This is an ex-ante fixed value during the fixed crediting period, the value is verified as in line with the registered PDD ^{/PDD/} .
	f_{wcm}	Data from registered GS-PDD	1	This is an ex-ante fixed value during the fixed crediting period, the value

				is verified as in line with the registered PDD ^{/PDD/} .
	f_{cap}	Data from registered GS-PDD	1	This is an ex-ante fixed value during the fixed crediting period, the value is verified as in line with the registered PDD ^{/PDD/} . The project will monitor electrical output of the project activity in accordance with the methodology and f_{cap} will be updated ex-post in case the actual electrical output exceeds the electrical output which is theoretically available on the basis of current baseline conditions.
	$Q_{OE,BL}$	Data from registered GS-PDD	254,368.7999 MWh	This is an ex-ante fixed value during the fixed crediting period, the value is verified as in line with the registered PDD ^{/PDD/} . If the annual power generation is larger than the value, the f_{cap} must be recalculated.
The following sources of information have been used in this context: • /MR/ • /XLS/ • /PDD/ • /PS/ • /VVS/ • /GSP/ • /GST/ • /unfccc/				
Findings	☒	The MR and the ER calculation have considered the parameters fixed ex-ante or at the renewal of the crediting period correctly, no deviations have been observed.		
	☐	The following deviations from the parameters fixed ex-ante or at renewal of crediting period have been identified in the course of this verification: - N/A		
	☐	In this context the following CARs, CLs, FARs have been raised: - N/A		
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.		
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.		
	The parameters fixed ex ante have been indicated in the registered GS PDD. And the MR is checked as in line with the PDD.			

D.6.2. Data and parameters monitored

D.6.2.1 Carbon Data and parameters monitored

Means of verification	During the verification all relevant monitoring parameters (as listed in chapter B.7.1 of the PDD) have been verified with regard to the
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	(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 results as well as the verification procedure are described parameter-wise in the project specific verification checklist (Appendix 5).
Findings	Refer to Appendix 5.
Conclusion	☐ No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☒ The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	It can be confirmed that all monitoring parameters have been measured / determined without material misstatements and in line with all applicable standards and relevant requirements.

D.6.2.2 Sustainable Data and parameters monitored

Means of verification	The monitoring of the contribution to sustainable development during this monitoring period according to the sustainability monitoring plan in GS registered Passport is verified as follows:			
	Sustainable development indicator	Chosen parameter	Frequency	Assessment by verification team
	Air Quality	The water sprinkling record, The local Residential comments through Interviewing, Dust remove system operation log	Regularly monitoring and aggregated for each monitoring period.	According to the registered passport, there is water sprinkling in the construction period. Through checking the water sprinkling record ^{/WSR/} in the construction period, the verification team confirms that the project owner sprinkled the water to reduce the dust pollution. In the absence of the project, the hot red coke would be quenched by CWQ system, which would result in much pollutants emission. The CDQ system will recover waste heat from red-hot coke to reduce the energy loss, additionally, the dust remove system is installed. Via checking the dust remove system operation log ^{/DROL/} and interviewing with local residential ^{/I2/} and checking the related questionnaires ^{/QUE/} , verification team confirms that the project owner collected the dust of 39,910.97t during this monitoring period to reduce the dust pollution. Thus the verification team is convinced that

				'air quantity' is positively improved compared to the baseline.
	Water Quantity	Water consumption reduction against to the CWQ system	Continuously measured and aggregated for each monitoring period	Before the implementation of the project, the hot red coke is quenched with industrial water, and the water consumption rate is 0.443 ton per ton of coke as defined in the GS Passport. With the implementation of the project during this monitoring period, 1,028,829t of industrial water is saved via checking the quantities of coke were quenched by the CDQ system ^{/CQ/} . Thus the verification team is convinced that 'Water quantity' is positively improved compared to the baseline.
	Quality of the employment	Training of staff	Recorded monthly and aggregated for each monitoring period	According to the registered Passport ^{/GSP/} , local people have no such opportunities to be trained on the technology and the monitoring of the plant operation, and the emergency and safety procedures in the baseline. Through document review ^{/TCR/} and onsite interview with relevant staff ^{/I1/} , the verification team confirms that the PP together with technology supplier organized training for the staff on the technology and the monitoring of the plant operation, and the emergency and safety procedures, which meets the future target for this parameter defined in the registered Passport. Therefore the verification team is convinced that the 'Quality of employment' is positively improved compared to the baseline.
	Quantitative employment and income	Number of jobs created in the operations	Recorded monthly and aggregated	According to the registered Passport ^{/GSP/} , local people have no

	generation	of the Project and their salary levels.	for each monitoring period	such job opportunities from the project, and their income has no increase in the baseline. Through document review^{/SSPS/ & TCR/ & EC/} and on-site interview with staff^{/11/}, it is confirmed that 57 people was employed in the monitoring period. This work can bring them additional income. The payslip sheets^{/SSPS/} provided indicated that the average annual salary is 38,276 CNY/year, which meets the future target for this parameter defined in the registered Passport and 8% higher than local average salary level according to Sichuan Statistic Yearbook 2014^{/SSY/}. Thus the verification team is convinced that the 'Quantitative employment and income generation' is positively improved compared to the baseline.
	Other pollutants	Solid waste treatment	Continuously measured and aggregated for each monitoring period	According to the registered Passport^{/GSP/}, the dust will be emitted into the air in the baseline. Through document review^{/DROL/} and on-site physical assessment, totally 39,910.97t of the dust collected by the project regularly transported for comprehensive use, which meets the future target for this parameter defined in the registered Passport^{/GSP/}. Thus the verification team is convinced that 'Other pollutants' is positively improved compared to the baseline.
Findings	N/A			
Conclusion	☐	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.		

	☒	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		In summary, the verification team confirms that the project under the Gold Standard results in a positive contribution to local sustainable development.

D.6.3. Implementation of sampling plan

Means of verification	The verification team has been checked whether the PPs have applied a sampling approach to determine the monitored values. Further it has been checked whether the PPs have correctly applied the implemented sampling plan including (i) description of the implemented sampling design (ii) collected data (iii) analysis of collected data (iv) demonstration on whether the required confidence/precision has been met. The following sources of information have been used in this context: • /MR/ • /XLS/ • /PDD/		
Findings	☒	The PPs have not applied sampling approaches for the parameters monitored.	
	☐	The PPs have applied sampling approaches for the following parameters monitored.	
		1	Parameter:
			Name:
			Description on how the sampling efforts and survey comply with the validated sampling plan:
		2	Parameter:
			Name:
			Description on how the sampling efforts and survey comply with the validated sampling plan:
	☐	In this context the following CARs, CLs, FARs have been raised:	
		-	
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.	
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.	
		N/A	

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

Means of verification	During the verification the relevant monitoring equipment has been checked whether the calibration requirements have been met; especially if the calibration frequency is in line with the requirements of the validated PDD and/or the applicable calibration standards. The results as well as the verification procedure are described equipment-wise in the project specific verification checklist (Appendix 6). The following sources of information have been used in this context:
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		• /MR/ • /XLS/ • /CAL/
Findings	☒	Based on the details listed in Appendix 6 the verification team can confirm that all installed monitoring equipment has been duly calibrated for this entire monitoring period.
	☐	Based on the assessment and information as per appendix 6 delay(s) in calibration have been identified. The PP has applied the maximum permissible error of the instrument to the measured values taken during the period between the scheduled date of calibration and the actual date of calibration. From the related calibration certificates and emission reduction calculation the verification team confirms that the maximum permissible error has been applied in a conservative manner so that the adjusted measured values due to the delayed calibration result in fewer claimed emission reductions. For details please refer to Appendix 6
	☐	In this context the following CARs, CLs, FARs have been raised:
		- N/A
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		The accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan and relevant national rules. The calibrations of all monitoring equipments installed have been verified as listed in table given in Appendix 6 to this report. Based on that the DOE can confirm that all installed monitoring equipment has been duly calibrated for this entire monitoring period.

D.8. Assessment of data and calculation of emission reductions or net removals

D.8.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	During the verification the calculation of baseline GHG emissions has been checked. In detail the following has been verified: • <i>Transparency</i>: It has been checked whether the calculation of baseline emissions is fully traceable and, where used, the Excel calculation provides all calculation formulae. • <i>Parameter consistency</i>: It has been checked whether all internal and external parameters and data used for the calculation are applied consistently in the monitoring report and the calculation spreadsheet. • <i>Correctness</i>: It has been checked whether the applied formulae and methods for calculating baseline emissions are in accordance with the monitoring plan and the approved methodology. • <i>Completeness</i>: It has been checked whether all calculations are complete and without omissions. The following sources of information have been used in this context: • /MR/ • /XLS/ Baseline Emissions Calculation Assessment: The formula used for the determination of baseline emissions which is consistent with the registered PDD and the applied methodology: $BE_y = BE_{En,y} + BE_{fst,y}$ Where: BE_y Total baseline emissions during the year y (tCO₂e)
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	$BE_{En,y}$ Baseline emissions from energy generated by the project activity during the year y (tCO₂e) $BE_{flst,y}$ Baseline emissions from generation of steam, if any, using fossil fuel, that would have been used for flaring the waste gas in absence of the project activity (tCO₂e) And: $BE_{En,y} = BE_{Elec,y} + BE_{Ther,y}$ $BE_{flst,y} = 0 \text{ (As per PDD, the project only involves the utilization of waste heat)}$ Where: $BE_{Elec,y}$ Baseline emissions from electricity power during the year y (tCO₂e) $BE_{Ther,y}$ Baseline emissions from thermal energy (due to heat generation by elemental process) during the year y (tCO₂e) As per the PDD, the Project utilizes waste heat for electricity power generation only, no thermal supply involved in the project, hence, $BE_{Ther,y} = 0$ And according to the PDD, $BE_{Elec,y} = f_{cap} \times f_{wcm} \times \sum_j \sum_i (EG_{i,j,y} \times EF_{Elec,i,j,y})$ Where: $EG_{i,j,y}$ The quantity of electricity supplied to the recipient j by generator, which in the absence of the project activity would have been sourced from source i (the grid or an identified source) during the year y (MWh) $EF_{Elec,i,j,y}$ The CO₂ emission factor for the electricity source i (is for the grid, and is for an identified source), displaced due to the project activity, during the year y (tCO₂e/MWh) f_{wcm} Fraction of total electricity generated by the project activity using waste energy. This fraction is 1 if the electricity generation is purely from use of waste energy f_{cap} Factor that determines the energy that would have been produced in project year y using waste energy generated at a historical level, expressed as a fraction of the total energy produced using waste source in year y. The ratio is 1 if the waste energy generated in project year y is the same or less than that generated at a historical level. As per the registered PDD, the electricity supply of identified baseline scenario come from CCPG, and the project only involves the utilization of waste heat, hence, $BE_{Elec,y} = f_{cap} \times f_{wcm} \times EG_{PJ,y} \times EF_{grid,CM,y}$ Where: $EG_{PJ,y}$ Quantity of net electricity generation supplied by the project for captive use (MWh) $EF_{grid,CM,y}$ Emission factor of CCPG in the monitoring period (tCO₂e/MWh) Finally, the baseline emission is calculated as $BE_y = BE_{Elec,y} = f_{cap} \times f_{wcm} \times EG_{PJ,y} \times EF_{grid,CM,y}$ For determination of parameter of f_{cap}: This monitoring period from 10/03/2014 to 31/05/2016 covers 814 days, $Q_{OE,y}$ is 364,741.5MWh, while $Q_{OE,BL}$ of 814 days is calculated as $254,368.7999 \text{ MWh} \times 814 \text{ days} \div 365 \text{ days} = 567,277.2688 \text{ MWh}$. $Q_{OE,y}$ is less than $Q_{OE,BL}$, hence, the value of f_{cap} is 1 according to the registered PDD and applied methodology.
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- For parameter f_{wcm} : it is defined as 1 because the electricity generation by the Project is purely from use of waste heat according to the registered PDD.
- For parameter of $EF_{grid,CM,y}$, it is determined ex-ante to be 0.7338tCO₂e/MWh in consistent with the registered PDD.
- For parameter of $EG_{PJ,y}$, it is measured by M2.

Calculation of BE_y

Period	$EG_{PJ,y}$ (MWh)	$EG_{grid,CM,y}$ (tCO ₂ e/MWh)	BE_y (tCO ₂ e)
10/03/2014-13/03/2014	1,455.00	0.7338	1,067.68
14/03/2014-20/03/2014	2,250.05	0.7338	1,651.09
21/03/2014-27/03/2014	2,351.00	0.7338	1,725.16
28/03/2014-03/04/2014	2,299.40	0.7338	1,687.30
04/04/2014-10/04/2014	2,274.90	0.7338	1,669.32
11/04/2014-17/04/2014	2,405.10	0.7338	1,764.86
18/04/2014-24/04/2014	2,327.30	0.7338	1,707.77
25/04/2014-01/05/2014	2,248.85	0.7338	1,650.21
02/05/2014-08/05/2014	2,335.20	0.7338	1,713.57
09/05/2014-15/05/2014	2,326.15	0.7338	1,706.93
16/05/2014-22/05/2014	2,003.15	0.7338	1,469.91
23/05/2014-29/05/2014	1,951.05	0.7338	1,431.68
30/05/2014-05/06/2014	2,196.55	0.7338	1,611.83
06/06/2014-12/06/2014	2,377.00	0.7338	1,744.24
13/06/2014-19/06/2014	2,190.80	0.7338	1,607.61
20/06/2014-26/06/2014	2,292.15	0.7338	1,681.98
27/06/2014-03/07/2014	2,130.55	0.7338	1,563.40
04/07/2014-10/07/2014	873.65	0.7338	641.08
11/07/2014-17/07/2014	1,002.75	0.7338	735.82
18/07/2014-24/07/2014	1,080.35	0.7338	792.76
25/07/2014-31/07/2014	1,234.70	0.7338	906.02
01/08/2014-07/08/2014	1,779.80	0.7338	1,306.02
08/08/2014-14/08/2014	2,972.00	0.7338	2,180.85
15/08/2014-21/08/2014	2,677.85	0.7338	1,965.01
22/08/2014-28/08/2014	2,561.95	0.7338	1,879.96
29/08/2014-04/09/2014	2,884.50	0.7338	2,116.65
05/09/2014-11/09/2014	1,880.35	0.7338	1,379.80
12/09/2014-18/09/2014	3,325.50	0.7338	2,440.25
19/09/2014-25/09/2014	2,481.40	0.7338	1,820.85
26/09/2014-02/10/2014	2,420.40	0.7338	1,776.09
03/10/2014-09/10/2014	2,460.40	0.7338	1,805.44
10/10/2014-16/10/2014	2,300.40	0.7338	1,688.03
17/10/2014-23/10/2014	2,323.35	0.7338	1,704.87
24/10/2014-30/10/2014	2,246.40	0.7338	1,648.41
31/10/2014-06/11/2014	2,325.00	0.7338	1,706.09
07/11/2014-13/11/2014	3,644.30	0.7338	2,674.19
14/11/2014-20/11/2014	3,861.20	0.7338	2,833.35
21/11/2014-27/11/2014	4,032.90	0.7338	2,959.34
28/11/2014-04/12/2014	3,831.75	0.7338	2,811.74
05/12/2014-11/12/2014	1,785.20	0.7338	1,309.98
12/12/2014-18/12/2014	3,134.90	0.7338	2,300.39
19/12/2014-25/12/2014	4,040.05	0.7338	2,964.59
26/12/2014-31/12/2014	2,761.70	0.7338	2,026.54
Total from 10/03/2014-31/12/2014	103,336.95	0.7338	75,828.66
01/01/2015-08/01/2015	4,094.75	0.7338	3,004.73
09/01/2015-15/01/2015	3,816.15	0.7338	2,800.29

	16/01/2015-22/01/2015	3,843.60	0.7338	2,820.43
	23/01/2015-29/01/2015	2,668.20	0.7338	1,957.93
	30/01/2015-05/02/2015	2,186.30	0.7338	1,604.31
	06/02/2015-12/02/2015	1,812.10	0.7338	1,329.72
	13/02/2015-19/02/2015	1,751.65	0.7338	1,285.36
	20/02/2015-26/02/2015	1,761.25	0.7338	1,292.41
	27/02/2015-05/03/2015	1,683.80	0.7338	1,235.57
	06/03/2015-12/03/2015	1,756.40	0.7338	1,288.85
	13/03/2015-19/03/2015	1,940.25	0.7338	1,423.76
	20/03/2015-26/03/2015	1,885.45	0.7338	1,383.54
	27/03/2015-02/04/2015	2,394.10	0.7338	1,756.79
	03/04/2015-09/04/2015	2,992.15	0.7338	2,195.64
	10/04/2015-16/04/2015	3,135.35	0.7338	2,300.72
	17/04/2015-23/04/2015	3,655.70	0.7338	2,682.55
	24/04/2015-30/04/2015	2,041.50	0.7338	1,498.05
	31/04/2015-07/05/2015	3,877.30	0.7338	2,845.16
	08/05/2015-14/05/2015	4,045.25	0.7338	2,968.40
	15/05/2015-21/05/2015	4,016.05	0.7338	2,946.98
	22/05/2015-28/05/2015	4,022.20	0.7338	2,951.49
	29/05/2015-04/06/2015	3,898.40	0.7338	2,860.65
	05/06/2015-11/06/2015	3,952.90	0.7338	2,900.64
	12/06/2015-18/06/2015	3,635.15	0.7338	2,667.47
	19/06/2015-25/06/2015	3,842.15	0.7338	2,819.37
	26/06/2015-02/07/2015	3,263.40	0.7338	2,394.68
	03/07/2015-09/07/2015	3,571.25	0.7338	2,620.58
	10/07/2015-16/07/2015	3,533.40	0.7338	2,592.81
	17/07/2015-23/07/2015	3,978.20	0.7338	2,919.20
	24/07/2015-30/07/2015	3,997.15	0.7338	2,933.11
	31/07/2015-06/08/2015	3,946.25	0.7338	2,895.76
	07/08/2015-13/08/2015	3,769.75	0.7338	2,766.24
	14/08/2015-20/08/2015	3,968.60	0.7338	2,912.16
	21/08/2015-27/08/2015	3,708.90	0.7338	2,721.59
	28/08/2015-03/09/2015	3,809.85	0.7338	2,795.67
	04/09/2015-10/09/2015	3,834.15	0.7338	2,813.50
	11/09/2015-17/09/2015	3,688.60	0.7338	2,706.69
	18/09/2015-24/09/2015	3,697.50	0.7338	2,713.23
	25/09/2015-01/10/2015	2,963.90	0.7338	2,174.91
	02/10/2015-08/10/2015	4,344.25	0.7338	3,187.81
	09/10/2015-15/10/2015	3,645.75	0.7338	2,675.25
	16/10/2015-22/10/2015	3,629.25	0.7338	2,663.14
	23/10/2015-29/10/2015	3,418.75	0.7338	2,508.68
	30/10/2015-05/11/2015	3,511.30	0.7338	2,576.59
	06/11/2015-12/11/2015	3,743.70	0.7338	2,747.13
	13/11/2015-19/11/2015	3,225.10	0.7338	2,366.58
	20/11/2015-26/11/2015	3,552.30	0.7338	2,606.68
	27/11/2015-03/12/2015	3,843.55	0.7338	2,820.40
	04/12/2015-10/12/2015	4,123.55	0.7338	3,025.86
	11/12/2015-17/12/2015	3,943.40	0.7338	2,893.67
	18/12/2015-24/12/2015	3,583.60	0.7338	2,629.65
	25/12/2015-31/12/2015	4,130.25	0.7338	3,030.78
	Total in 2015	175,133.75	0.7338	128,513.16
	01/01/2016-07/01/2016	4,140.60	0.7338	3,038.37
	08/01/2016-14/01/2016	3,855.40	0.7338	2,829.09
	15/01/2016-21/01/2016	3,908.50	0.7338	2,868.06
	22/01/2016-28/01/2016	1,301.55	0.7338	955.08
	29/01/2016-04/02/2016	4,422.95	0.7338	3,245.56
	05/02/2016-11/02/2016	2,846.10	0.7338	2,088.47
	12/02/2016-18/02/2016	874.85	0.7338	641.96

	19/02/2016-25/02/2016	-	0.7338	-
	26/02/2016-03/03/2016	-	0.7338	-
	04/03/2016-10/03/2016	2,123.60	0.7338	1,558.30
	11/03/2016-17/03/2016	3,907.85	0.7338	2,867.58
	18/03/2016-24/03/2016	4,576.95	0.7338	3,358.57
	25/03/2016-31/03/2016	4,056.65	0.7338	2,976.77
	01/04/2016-07/04/2016	3,490.05	0.7338	2,561.00
	08/04/2016-14/04/2016	3,556.40	0.7338	2,609.69
	15/04/2016-21/04/2016	4,178.10	0.7338	3,065.89
	22/04/2016-28/04/2016	3,275.65	0.7338	2,403.67
	29/04/2016-05/05/2016	4,170.30	0.7338	3,060.17
	06/05/2016-12/05/2016	4,115.35	0.7338	3,019.84
	13/05/2016-19/05/2016	4,089.25	0.7338	3,000.69
	20/05/2016-26/05/2016	4,155.95	0.7338	3,049.64
	27/05/2016-31/05/2016	3,102.85	0.7338	2,276.87
	Total from 01/01/2016-31/05/2016	70,148.90	0.7338	51,475.27
	Sum of this MP	348,619.60	0.7338	255,817.09
	The baseline emission (BE) during this monitoring period are calculated as 255,817.09 tCO₂e .			
Findings	☒	The calculation of the baseline emissions was found to be fully compliant with the above stated principles. The calculations of baseline GHG emissions or baseline net GHG removals have been carried out in accordance with the formulae and methods described in the registered monitoring plan, the applied methodology and, where applicable, the applied standardized baseline. Any assumptions used in emission or removal calculations have been justified. Appropriate emission factors, IPCC default values, GWPs and other reference values have been correctly applied. No errors, miscalculations, omissions, misstatements or incomplete information has been identified.		
	☐	The verification team has identified mistakes in the baseline emissions calculation or the underlying calculation approaches.		
	☒	In this context the following CARs, CLs, FARs have been raised: - CAR 6		
Conclusion	☐	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.		
	☒	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.		
	Where corrections were required a revised baseline emissions calculation was prepared by the PPs and presented to the verification team. All raised issues were addressed appropriately so that it can be confirmed that the baseline calculation is overall correct.			

D.8.2. Calculation of project GHG emissions or actual net GHG removals by sinks

Means of verification	During the verification the calculation of project GHG emissions has been checked. In detail the following has been verified: • Transparency: It has been checked whether the calculation of project emissions is fully traceable and, where used, the Excel calculation provides all calculation formulae. • Parameter consistency: It has been checked whether all internal and external parameters and data used for the calculation are applied consistently in the monitoring report and the calculation spreadsheet. • Correctness: It has been checked whether the applied formulae and methods for calculating project emissions are in accordance with the monitoring plan and the approved methodology.
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- Completeness: It has been checked whether all calculations are complete and without omissions.

The following sources of information have been used in this context:

- /MR/
- /XLS/

Project Emission Calculation Assessment:

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

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

Where:

PE_y	Project emissions due to the project activity (tCO ₂ e)
$PE_{AF,y}$	Project activity emissions from on-site consumption of fossil fuels by the unit process(es) and/or cogeneration plant(s) if they are used as supplementary fuels due to non-availability of waste energy to the project activity or due to any other reason (tCO ₂ e)
$PE_{EL,y}$	Project activity emissions from on-site consumption of electricity for gas cleaning equipment or other supplementary electricity consumption (tCO ₂ e)

And:

$$PE_{AF,y} = 0 \text{ (As per the PDD)}$$

$$PE_{EL,y} = \sum_j EC_{PJ,j,y} \times EF_{EL,j,y} \times (1 + TDL_{j,y})$$

Where:

$EC_{PJ,j,y}$	Additional power consumed in year y as a result of the implementation of the project activity source j (MWh);
$EF_{EL,j,y}$	Emission factor for power generation for source j in year y (tCO ₂ /MWh);
$TDL_{j,y}$	Average technical transmission and distribution losses for providing power to the project by the Sichuan Power Grid (the sub-power grid of the CCPG, where the project is sited in) in year y.

Finally, the project emission is calculated as

$$PE_y = PE_{EL,y} = \sum_j EC_{PJ,j,y} \times EF_{EL,j,y} \times (1 + TDL_{j,y})$$

- For parameter of $EF_{EL,j,y}$, in this case it is the grid emission factor of CCPG $EF_{grid,CM,y}$, it is determined ex-ante to be 0.7338tCO₂e/MWh in consistent with the registered PDD.
- For parameter $TDL_{j,y}$: according to the MR, it is determined as 9.36%, which is confirmed via checking “2011 Statistics Collections for Power Sector issued by China Electricity Council”, issued in July 2012.
- For parameter of $EC_{PJ,j,y}$, it is measured by M3.

Calculation of PE_y

Period	$EC_{PJ,j,y}$ (MWh)	$EG_{grid,CM,y}$ (tCO ₂ e /MWh)	$TDL_{j,y}$	PE_y (tCO ₂ e)
10/03/2014-13/03/2014	91.1	0.7338	9.36%	73.11
14/03/2014-20/03/2014	142.1	0.7338	9.36%	114.03
21/03/2014-27/03/2014	149.8	0.7338	9.36%	120.21
28/03/2014-03/04/2014	136.6	0.7338	9.36%	109.62
04/04/2014-10/04/2014	142.2	0.7338	9.36%	114.11

	11/04/2014-17/04/2014	135.5	0.7338	9.36%	108.74
	18/04/2014-24/04/2014	141.1	0.7338	9.36%	113.23
	25/04/2014-01/05/2014	140	0.7338	9.36%	112.35
	02/05/2014-08/05/2014	147.9	0.7338	9.36%	118.69
	09/05/2014-15/05/2014	147.9	0.7338	9.36%	118.69
	16/05/2014-22/05/2014	160.5	0.7338	9.36%	128.8
	23/05/2014-29/05/2014	222.3	0.7338	9.36%	178.39
	30/05/2014-05/06/2014	229.2	0.7338	9.36%	183.93
	06/06/2014-12/06/2014	164.3	0.7338	9.36%	131.85
	13/06/2014-19/06/2014	148.2	0.7338	9.36%	118.93
	20/06/2014-26/06/2014	179.6	0.7338	9.36%	144.13
	27/06/2014-03/07/2014	165.9	0.7338	9.36%	133.13
	04/07/2014-10/07/2014	90.4	0.7338	9.36%	72.54
	11/07/2014-17/07/2014	61.6	0.7338	9.36%	49.43
	18/07/2014-24/07/2014	137.8	0.7338	9.36%	110.58
	25/07/2014-31/07/2014	122	0.7338	9.36%	97.9
	01/08/2014-07/08/2014	114.5	0.7338	9.36%	91.88
	08/08/2014-14/08/2014	266.7	0.7338	9.36%	214.02
	15/08/2014-21/08/2014	221.6	0.7338	9.36%	177.83
	22/08/2014-28/08/2014	313.4	0.7338	9.36%	251.5
	29/08/2014-04/09/2014	343.7	0.7338	9.36%	275.81
	05/09/2014-11/09/2014	260	0.7338	9.36%	208.65
	12/09/2014-18/09/2014	386	0.7338	9.36%	309.76
	19/09/2014-25/09/2014	215.7	0.7338	9.36%	173.1
	26/09/2014-02/10/2014	215.7	0.7338	9.36%	173.1
	03/10/2014-09/10/2014	215.9	0.7338	9.36%	173.26
	10/10/2014-16/10/2014	193.6	0.7338	9.36%	155.36
	17/10/2014-23/10/2014	204.3	0.7338	9.36%	163.95
	24/10/2014-30/10/2014	181.2	0.7338	9.36%	145.41
	31/10/2014-06/11/2014	216.1	0.7338	9.36%	173.42

	07/11/2014-13/11/2014	302.3	0.7338	9.36%	242.59
	14/11/2014-20/11/2014	351.1	0.7338	9.36%	281.75
	21/11/2014-27/11/2014	424	0.7338	9.36%	340.25
	28/11/2014-04/12/2014	394	0.7338	9.36%	316.18
	05/12/2014-11/12/2014	232.7	0.7338	9.36%	186.74
	12/12/2014-18/12/2014	332.8	0.7338	9.36%	267.07
	19/12/2014-25/12/2014	344.4	0.7338	9.36%	276.38
	26/12/2014-31/12/2014	246.197	0.7338	9.36%	197.57
	Total from 10/03/2014-31/12/2014	9031.897	0.7338	9.36%	7,247.97
	01/01/2015-08/01/2015	278.1	0.7338	9.36%	223.17
	09/01/2015-15/01/2015	259.7	0.7338	9.36%	208.41
	16/01/2015-22/01/2015	262.3	0.7338	9.36%	210.49
	23/01/2015-29/01/2015	210.7	0.7338	9.36%	169.08
	30/01/2015-05/02/2015	252.5	0.7338	9.36%	202.63
	06/02/2015-12/02/2012	228.2	0.7338	9.36%	183.13
	13/02/2015-19/02/2015	232.85	0.7338	9.36%	186.86
	20/02/2015-26/02/2015	232.85	0.7338	9.36%	186.86
	27/02/2015-05/03/2015	207.1	0.7338	9.36%	166.19
	06/03/2015-12/03/2015	203.1	0.7338	9.36%	162.98
	13/03/2015-19/03/2015	225	0.7338	9.36%	180.56
	20/03/2015-26/03/2015	236.3	0.7338	9.36%	189.63
	27/03/2015-02/04/2015	304.1	0.7338	9.36%	244.04
	03/04/2015-09/04/2015	302.2	0.7338	9.36%	242.51
	10/04/2015-16/04/2015	327.1	0.7338	9.36%	262.49
	17/04/2015-23/04/2015	408.6	0.7338	9.36%	327.89
	24/04/2015-30/04/2015	269.1	0.7338	9.36%	215.95
	31/04/2015-07/05/2015	389.9	0.7338	9.36%	312.89
	08/05/2015-14/05/2015	389.9	0.7338	9.36%	312.89
	15/05/2015-21/05/2015	351.6	0.7338	9.36%	282.15

	22/05/2015-28/05/2015	360	0.7338	9.36%	288.89
	29/05/2015-04/06/2015	358.3	0.7338	9.36%	287.53
	05/06/2015-11/06/2015	354.9	0.7338	9.36%	284.8
	12/06/2015-18/06/2015	300.4	0.7338	9.36%	241.07
	19/06/2015-25/06/2015	323.9	0.7338	9.36%	259.92
	26/06/2015-02/07/2015	312.1	0.7338	9.36%	250.46
	03/07/2015-09/07/2015	424	0.7338	9.36%	340.25
	10/07/2015-16/07/2015	381.6	0.7338	9.36%	306.23
	17/07/2015-23/07/2015	345.1	0.7338	9.36%	276.94
	24/07/2015-30/07/2015	401.2	0.7338	9.36%	321.96
	31/07/2015-06/08/2015	308.1	0.7338	9.36%	247.25
	07/08/2015-13/08/2015	380.6	0.7338	9.36%	305.43
	14/08/2015-20/08/2015	352.5	0.7338	9.36%	282.88
	21/08/2015-27/08/2015	335.7	0.7338	9.36%	269.39
	28/08/2015-03/09/2015	258.6	0.7338	9.36%	207.52
	04/09/2015-10/09/2015	292.7	0.7338	9.36%	234.89
	11/09/2015-17/09/2015	264.3	0.7338	9.36%	212.1
	18/09/2015-24/09/2015	298.6	0.7338	9.36%	239.62
	25/09/2015-01/10/2015	341.4	0.7338	9.36%	273.97
	02/10/2015-08/10/2015	393.8	0.7338	9.36%	316.02
	09/10/2015-15/10/2015	334.5	0.7338	9.36%	268.43
	16/10/2015-22/10/2015	334.8	0.7338	9.36%	268.67
	23/10/2015-29/10/2015	310	0.7338	9.36%	248.77
	30/10/2015-05/11/2015	294.5	0.7338	9.36%	236.33
	06/11/2015-12/11/2015	347.9	0.7338	9.36%	279.18
	13/11/2015-19/11/2015	348.1	0.7338	9.36%	279.34
	20/11/2015-26/11/2015	260.3	0.7338	9.36%	208.89
	27/11/2015-03/12/2015	360.6	0.7338	9.36%	289.38
	04/12/2015-10/12/2015	403.7	0.7338	9.36%	323.96
	11/12/2015-17/12/2015	280	0.7338	9.36%	224.7

	18/12/2015-24/12/2015	310.4	0.7338	9.36%	249.09
	25/12/2015-31/12/2015	434.6	0.7338	9.36%	348.76
	Total in 2015	16,378.4	0.7338	9.36%	13,143.42
	01/01/2016-07/01/2016	317.1	0.7338	9.36%	254.47
	08/01/2016-14/01/2016	402.5	0.7338	9.36%	323
	15/01/2016-21/01/2016	314.8	0.7338	9.36%	252.62
	22/01/2016-28/01/2016	183.9	0.7338	9.36%	147.58
	29/01/2016-04/02/2016	277	0.7338	9.36%	222.29
	05/02/2016-11/02/2016	234.2	0.7338	9.36%	187.94
	12/02/2016-18/02/2016	109.299	0.7338	9.36%	87.71
	19/02/2016-25/02/2016	51.601	0.7338	9.36%	41.41
	26/02/2016-03/03/2016	59.603	0.7338	9.36%	47.83
	04/03/2016-10/03/2016	250.797	0.7338	9.36%	201.26
	11/03/2016-17/03/2016	394.7	0.7338	9.36%	316.74
	18/03/2016-24/03/2016	458.405	0.7338	9.36%	367.86
	25/03/2016-31/03/2016	389.095	0.7338	9.36%	312.24
	01/04/2016-07/04/2016	357.903	0.7338	9.36%	287.21
	08/04/2016-14/04/2016	391.697	0.7338	9.36%	314.33
	15/04/2016-21/04/2016	354.7	0.7338	9.36%	284.64
	22/04/2016-28/04/2016	385.696	0.7338	9.36%	309.51
	29/04/2016-05/05/2016	399.104	0.7338	9.36%	320.27
	06/05/2016-12/05/2016	345.496	0.7338	9.36%	277.25
	13/05/2016-19/05/2016	356.704	0.7338	9.36%	286.25
	20/05/2016-26/05/2016	367.397	0.7338	9.36%	294.83
	27/05/2016-31/05/2016	331.403	0.7338	9.36%	265.95
	Total from 01/01/2016-31/05/2016	6,733.1	0.7338	9.36%	5,403.19
	Sum of this MP	32,143.397	0.7338	9.36%	25,794.58
	The project emissions (PE _y) during this monitoring period are 25,794.58 tCO ₂ e.				
Findings	☒	The calculation of the project emissions was found to be fully compliant with the above stated principles.			

		The calculations of project GHG emissions or actual net GHG removals have been carried out in accordance with the formulae and methods described in the registered monitoring plan, the applied methodology and, where applicable, the applied standardized baseline. Any assumptions used in emission or removal calculations have been justified. Appropriate emission factors, IPCC default values, GWPs and other reference values have been correctly applied. No errors, miscalculations, omissions, misstatements or incomplete information have been identified.
	☐	The verification team has identified mistakes in the project emissions calculation or the underlying calculation approaches.
	☒	In this context the following CARs, CLs, FARs have been raised:
		- N/A
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		It can be confirmed that the project emissions calculation is overall correct.

D.8.3. Calculation of leakage GHG emissions

Means of verification		In accordance with ACM0012 ver. 04.0.0, registered PDD and validation report, leakage of the project activity is not considered. During the verification it has been checked whether leakage emissions have to be considered and, in cases where leakage emissions have to be calculated, the respective calculation of leakage GHG emissions has been checked. In such cases the same verification principles have been considered as for the baseline and project emissions calculation. The following sources of information have been used in this context: • /MR/ • /PDD/ • /ACM0012/ • /XLS/
Findings	☒	No leakage emissions were to be considered (LE = 0).
	☐	The calculation of the leakage emissions was found to be fully compliant with the above stated principles (see 8.1 and 8.2). The calculations of leakage GHG emissions have been carried out in accordance with the formulae and methods described in the registered monitoring plan, the applied methodology and, where applicable, the applied standardized baseline. Any assumptions used in leakage emissions calculations have been justified. Where applicable, appropriate emission factors, IPCC default values, GWPs and other reference values have been correctly applied. No errors, miscalculations, omissions, misstatements or incomplete information have been identified.
	☐	The verification team has identified mistakes in the leakage emissions calculation or the underlying calculation approaches.
	☐	In this context the following CARs, CLs, FARs have been raised:
		- N/A
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		It can be confirmed that the no leakage emissions were to be considered (LE = 0).

D.8.4. Summary of calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

Means of verification	The verification team has checked if the MR includes a summary table of the emission reductions calculation specifying separately																														
	-	Total baseline emissions,																													
	-	Total project emissions,																													
	-	Total leakage,																													
	-	Total emission reductions.																													
	It has been assessed whether the values are correct or need to be revised as a consequence of issues identified above.																														
	Summary of emission reductions during the monitoring period:																														
	$ER_y = BE_y - PE_y$																														
	Where:																														
	ER_y	-Emission reductions (t CO ₂ e)																													
BE_y	-Baseline Emissions (t CO ₂ e)																														
PE_y	-Project Emissions (t CO ₂ e)																														
Emission Reductions Calculation																															
<table><tr><th rowspan="2">Parameters Period</th><th>Baseline Emissions BE_y</th><th>Project Emissions PE_y</th><th>Leakage Emissions LE_y</th><th>Emission Reductions ER_y</th></tr><tr><th>(tCO₂e)</th><th>(tCO₂e)</th><th>(tCO₂e)</th><th>(tCO₂e)</th></tr><tr><td>10/03/2014-31/12/2014</td><td>75,828.66</td><td>7,247.97</td><td>0</td><td>68,580</td></tr><tr><td>01/01/2015-31/12/2015</td><td>128,513.16</td><td>13,143.42</td><td>0</td><td>115,369</td></tr><tr><td>01/01/2016-31/05/2016</td><td>51,475.27</td><td>5,403.19</td><td>0</td><td>46,072</td></tr><tr><td>Total</td><td>255,817.09</td><td>25,794.58</td><td>0</td><td>230,021</td></tr></table>			Parameters Period	Baseline Emissions BE_y	Project Emissions PE_y	Leakage Emissions LE_y	Emission Reductions ER_y	(tCO ₂ e)	(tCO ₂ e)	(tCO ₂ e)	(tCO ₂ e)	10/03/2014-31/12/2014	75,828.66	7,247.97	0	68,580	01/01/2015-31/12/2015	128,513.16	13,143.42	0	115,369	01/01/2016-31/05/2016	51,475.27	5,403.19	0	46,072	Total	255,817.09	25,794.58	0	230,021
Parameters Period	Baseline Emissions BE_y	Project Emissions PE_y		Leakage Emissions LE_y	Emission Reductions ER_y																										
	(tCO ₂ e)	(tCO ₂ e)	(tCO ₂ e)	(tCO ₂ e)																											
10/03/2014-31/12/2014	75,828.66	7,247.97	0	68,580																											
01/01/2015-31/12/2015	128,513.16	13,143.42	0	115,369																											
01/01/2016-31/05/2016	51,475.27	5,403.19	0	46,072																											
Total	255,817.09	25,794.58	0	230,021																											
All the figures as per the monitoring report were cross-checked by the verification team against basic monitored data.																															
No malfunction of all the meters was detected during the monitoring period and the backup system as indicated in the PDD and monitoring report was not adopted.																															
Findings	☒	Section E.4 of the MR includes in a summary table of the emission reductions calculation.																													
	☒	The summary table specified the total baseline, project and leakage emissions as well as the total emission reductions separately.																													
	☒	The values as specified in the ER summary table are correct; no issues have been identified during the verification which requires changes in the ER calculation.																													
	☐	During the verification issues with impact on the ER calculation have been identified.																													
	☐	In this context the following CARs, CLs, FARs have been raised: - N/A																													
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.																													
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.																													
	It can be confirmed that the emission reduction calculation is overall correct.																														

D.8.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Means of verification	The verification team has checked if the MR includes a comparison of actual values of the monitoring period with the estimations in the registered PDD. It has further checked which of the below listed cases is applicable for the calculated ER of the current monitoring period.
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Findings	☒	Case 1: The ex-ante estimated value was found to be proportionally higher than the ex-post determined value. No further action is deemed required.
	☐	Case 2: The ex-ante estimated value fits very good to the actually monitored value. No further justification is deemed required.
	☐	Case 3: The ex-ante estimated value was found to be proportionally lower than the ex-post determined value.
	☐	In this context the following CARs, CLs, FARs have been raised: - N/A
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		The MR includes a comparison of the calculated actual emission reductions with the ex-ante calculated values in the latest approved PDD. It is confirmed that the ex-ante estimated value was found to be proportionally higher than the ex-post determined value. No further action is deemed required.

D.8.6. Remarks on difference from estimated value in registered PDD

Means of verification	On the basis of the above comparison of actual values of the monitoring period with the estimations in the registered PDD (D.8.5) the verification team has checked whether (in case 3) an appropriate explanation is included in the MR.	
Findings	☒	No further justification or explanation is deemed required as actual emissions of this MP do not exceed significantly the ex-ante calculated emission reductions (applicable for case 1 and 2).
	☐	For case 3: The PP has provided a related justification in the MR. The reasons for the increase are as follows: -
	☐	In this context the following CARs, CLs, FARs have been raised: - N/A
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		It is confirmed that the ex-ante estimated value was found to be proportionally higher than the ex-post determined value. No further action is deemed required.

D.8.7. 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	The verification team has checked chapter E.4 of the MR and the emission reduction calculation sheet ^{/XLS/} .	
Findings	☒	The MR in section E.4 includes a summary table of the ER breakdown a) ER up to 2012-12-31 and b) ER from 2013-01-01 onwards
	☐	The breakdown of the ERs during the first commitment period and from 2013-01-01 onwards is as follows:
	☐	The ER have completely been generated during the first commitment period
	☒	The ERs have completely been generated from 2013-01-01 onwards,
	☐	The ERs have partly been generated during the first commitment period and partly from 2013-01-01 onwards.

	☒ The breakdown of the ERs is correct, considering the applicable guidance.			
		until 2012-12-31 ¹⁾	from 2013-01-01 ¹⁾	Sum
	Emission reductions [tCO _{2e}]	0	230,021	230,021
	¹⁾ Both days included			
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.		
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.		
	The data provided in the MR is correct as well as the related breakdown. The pro-rata approach was correctly applied to the calculations of GHG emission reductions or net anthropogenic GHG removals in accordance with the project standard, as the monitoring period starts after 01/01/2013 and ends anytime thereafter.			

SECTION E. Internal quality control

Before the submission of the final verification report a technical review of the whole verification procedure was carried out. The technical reviewers are competent GHG auditors being appointed for the scope this project falls under. The technical reviewers are not considered to be part of the verification team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the verification opinion and the topic specific assessments as prepared by the verification team leader may have been confirmed or revised. Furthermore reporting improvements might have been achieved.

After the successful technical review an overall (esp. procedural) assessment of the complete verification has been carried out by a senior assessor located in the accredited premises of TÜV NORD.

After this step the submission for requesting for issuance is conducted.

SECTION F. Verification opinion

Beijing Carbon Invcap International Carbon Assetment Management Co., Ltd. has commissioned the TÜV NORD JI/CDM Certification Program to carry out the Gold Standard 2nd periodic verification of the project: “The CDQ Project in Tranvic Group”, with regard to the relevant requirements for GS project activities. The project reduces GHG emissions by recovering the waste heat generated in coke production for captive use to displace the equivalent electricity generation by the CCPG. This verification covers the period from 10/03/2014-31/05/2016 (Including both days).

As a result of this verification, the verifier confirms that:

- all operations of the project are implemented and installed as planned and described in the validated project design document.
- the monitoring plan is in accordance with the applied approved CDM methodology ACM0012(version 04.0.0).
- the monitoring report is in accordance with the relevant GS requirements^{/GSR/}.
- the project contributes to sustainability development.
- The project has generated GHG emission reductions.

TÜV NORD JI/CDM CP further confirms that the project has achieved emission reductions in the above mentioned reporting period as follows:

Emission reductions: 230,021 t CO₂e

SECTION G. Certification statement

As a duly accredited DOE, TÜV NORD CERT confirms that the project

“The CDQ Project in Tranvic Group”

registered under

GS-No. : 2460

has achieved emission reductions in accordance with all applicable requirements for registered GS project activities during the current monitoring period

MP-No.: 2nd

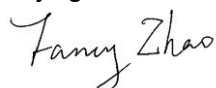
from: 10/03/2014

to: 31/05/2016

(including both days) as follows:

Emission reductions: **230,021 t CO₂e.**

Beijing, 14/11/2016



Zhao Xuejiao
Team Leader

Appendix 1. Abbreviations

Abbreviations	Full texts
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CCPG	Central China Power Grid
CDM	Clean Development Mechanism
CL	Clarification Request
CO ₂	Carbon dioxide
CO _{2eq}	Carbon dioxide equivalent
CP	Crediting Period
DCS	Distributed Control System
DverR	Draft Verification Report
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GS	Gold Standard
GSR	Gold Standard Requirement
GST	Gold Standard Toolkit
GSP	Gold Standard Passport
MP	Monitoring Plan
MR	Monitoring Report
PA	Project Activity
PDD	Project Design Document
PP	Project Participant
QA/QC	Quality Assurance / Quality Control
SD	Sustainability Development
SDI	Sustainability Development Indicator
SDM	SD Matrix
UNFCCC	United Nations Framework Convention on Climate Change
VAM	Ventilation Air Methane
VER	Voluntary Emission Reduction
VVS	Validation and Verification Standard
XLS	Emission Reduction Calculation Spread Sheet

Appendix 2. Competence of team members and technical reviewers



Statement of Competence
Appointment and authorization according to the procedures
of the TÜV NORD JICDM Certification Program

Ms. Xue Jiao Fancy Zhao

SCHEME	STATUS	VALID UNTIL
CDM	Lead Assessor (Validation, Verification)	2019-06-07
VCS / ISO 14064-2	Lead Assessor	2019-06-07

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA	TR SUBCATEGORIES
1.2	Renewable Energies	

230 – Rev. 5, Date: 2016-02-05

001-VA050-F20.doc 001-VA050-F20-rv5 / 2012-10-25



Statement of Competence
Appointment and authorization according to the procedures
of the TÜV NORD JICDM Certification Program

Mr. Jianmin Wu

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.1	Thermal Energy Generation
4.3	Iron and Steel
4.5	Waste Heat Recovery
5.1	Chemical Process Industries
11.1	Chemical Process Industries
12.1	Chemical Process Industries
- including verification -	

260 – Rev. 0, Date: 2011-04-18

001-VA050-F20-rv0 / 2011-04-18 001-VA050-F20-rv0 / 2011-04-18



Statement of Competence
Appointment and authorization according to the procedures
of the TÜV NORD JICDM Certification Program

Mr. Rainer Winter

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2019-07-01
J1	Senior Assessor Technical Reviewer	2019-07-01
VCS / ISO 14064-2	Senior Assessor Technical Reviewer	2019-07-01

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.1	Thermal Energy Generation
1.2	Renewables
4.1	Cement and lime production
4.2	Paper
5.1	Chemical Industry
5.2	Caprolactam, nitric and adipic acid
8.1	Mining/mineral production
9.1	Aluminium and magnesium production
9.2	Iron, steel and Ferro-silloy production
11.1	Emissions of fluorinated gases
11.2	Refrigerant gas production
12.1	Chemical industry
13.1	Solid waste and wastewater

003 – Rev. 10, Date: 2016-07-01



Statement of Competence
Appointment and authorization according to the procedures
of the TÜV NORD JICDM Certification Program

Ms. Alexandra Nuske

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2019-03-03
J1	Senior Assessor Technical Reviewer	2019-03-03
VCS / ISO 14064-2	Senior Assessor Technical Reviewer	2019-03-03

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
14.1	Afforestation and reforestation

095 – Rev. 8, Date: 2016-11-02

Appendix 3. Documents reviewed or referenced

No	Author	Title	References to the document	Provider
1	Neijiang City Administrative Bureau for Industry and Commerce	Business License ^{/BL/}	Business License of Neijiang Bowei Xinyu Chemical Industry Co., Ltd. Operation time from 2010-11-29 until 2040-06-11	Project Owner
2	Chengyu Vanadium Titanium Science and Technology Co., Ltd.	Calibration certificates ^{/CAL/}	Calibration Certificates for meters M1, M2 and M3 dated on 19/01/2014, 05/01/2015, 04/01/2016 valid to 03/01/2017	Project Owner
3	Chengyu Vanadium Titanium Science and Technology Co., Ltd.	Continuous Input/Grievance Mechanism Book ^{/CIGMB/}	Continuous Input/Grievance Mechanism Book located in the reception rooms of Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Project Owner
4	Sichuan Provincial Neijiang Quality and Technology Supervision Bureau	Certificate of Metrological Authorization ^{/CMA/}	Certificate of metrological authorization to Chengyu Vanadium Titanium Science and Technology Co., Ltd., issued on 2013-06-11, valid to 2014-06-10, Ref No. Chuanneijishou(2013)03, and issued on 2014-06-10, valid to 2016-06-09, Ref No. Chuanneijishou(2014)03.	Project Owner
5	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Coke Quenched ^{/CQ/}	Quantities of coke were quenched by the CDQ system during this monitoring period	Project Owner
6	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Daily Handing Over Record ^{/DHOR/}	Daily Handing Over Record, 13/05/2013	Project Owner
7	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Dust remove system operation log ^{/DROL/}	Dust remove system and dust transportation operation log	Project Owner
8	Sichuan Province Power Grid company	Electricity Balance Sheet ^{/EBS/}	Electricity Balance Sheets covering the monitoring period - Daily electricity balance sheets issued by project owner - Period electricity balance sheets issued by project owner corresponding to the ER sheet	Project Owner
9	Neijiang Bowei Xinyu Chemical Industry Co., Ltd. and employments	Employment Contract ^{/EC/}	Employment Contracts of Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Project Owner
10	Sichuan Provincial Electricity Supply Co., Ltd.	Grid Connection Approval ^{/GCA/}	Grid connection approval for the proposed project activity, dated on 18/06/2010	Project Owner
11	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	LOG ^{/LOG/}	- Sample copy of project operation daily records - Equipment daily check log - Equipment mandatory maintenance records	Project Owner

No	Author	Title	References to the document	Provider
12	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Monitoring Manual ^{/MM/}	Monitoring Manual for the project activity and project site management rules and regulations for power plant	Project Owner
13	Goldchina Consultancy International Co., Ltd	Monitoring Report ^{/MR/}	Monitoring Report of The CDQ Project in Tranvic Group - Draft version dated 23/09/2016, version 01 - Final version, dated 02/11/2016, version 02	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.
14	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Meter Reading Records ^{/MRR/}	Daily Meter reading records of all the meters M1, M2 and M3	Project Owner
15	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Project Operation and Maintenance Records ^{/O&M/}	Project Operation and Maintenance Records and Regulations of CDQ power plant - Sample copy of O&M records - Steam Turbine & Generator Operation Safety Management Regulations - Routing inspection operation instruction - Routing inspection line diagram - Fire emergency plan	Project Owner
16	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Power Wiring Diagram ^{/PWD/}	Power Wiring Diagram derived from the DCS system of the power plant	Project Owner
17	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	QA/QC procedures ^{/QAQC/}	QA/QC procedures of implementation of the project, including the emergency response procedure	Project Owner
18	Local stakeholders	Questionnaire ^{/QUE/}	Questionnaire to local stakeholders about the environment and sustainable development impact from the project	Project Owner
19	Local stakeholders	Staff Salary Payslip Sheet ^{/SSPS/}	Monthly Staff Salary Payslip Sheet covering this monitoring period	Project Owner
20	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Training and Competence Records ^{/TCR/}	Project Responsibilities, Training and Competence Records - Project Organization Chart and responsibilities - Staff Training Records - Operator Certificates - Internal audit record covering this monitoring period	Project Owner
21	Hangzhou Boiler Group Co., Ltd. Qingdao Jieneng Steam Turbine Group Co., Ltd. Dongfang Electric Consortium Dongfeng Electric Machinery Co., Ltd.	Technical Particulars of equipment ^{/TP/}	Technical Particulars for main equipments i.e. Boiler & steam turbine & generator	Project Owner

No	Author	Title	References to the document	Provider
22	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Water sprinkling record ^{/WSR/}	water sprinkling record ^{/WSR/} in the construction period	Project Owner
23	Goldchina Consultancy International Co., Ltd	Emission Reduction Calculation Sheets ^{/XLS/}	Emission Reduction Calculation sheets (related to MR)	Project Owner
24	UNFCCC	Applied methodology and tools ^{/ACM0012/}	Approved CDM methodology ACM0012: “Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects” (Version 04.0.0) The approved “Tool to calculate the emission factor for an electricity system” (Version 03.0.0) are also employed for the calculation of emission factor. The approved “Tool to calculate baseline, project and/or leakage emissions from electricity consumption” (version 01) was applied to calculate the project emission.	UNFCCC Website
25	Gold Standard	Gold Standard Annexes ^{/Annex-GS/}	Gold Standard Annexes http://www.cdmgoldstandard.org/project-certification/rules-and-toolkit	Gold Standard
26	TÜV NORD JI / CDM Certification Program	CP Manual ^{/CPM/}	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)	TÜV NORD JI / CDM Certification Program
27	China DNA	Grid Emission Factor ^{/GEF/}	Official data sources for Grid Emission Factor (Central China Power Grid) published by the Chinese DNA dated 15/10/2012	http://119.90.25.22/cdm.ccchina.gov.cn/WebSite/CDM/UpFile/File2975.pdf
28	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Gold Standard Passport ^{/GSP/}	Gold Standard Passport for GS VER project “The CDQ Project in Tranvic Group” version 04, dated 20/03/2014.	Gold Standard
29	Gold Standard	Gold Standard Requirement ^{/GSR/}	Gold Standard Requirement version 2.2	Gold Standard
30	Gold Standard	Gold Standard Toolkit ^{/GST/}	Gold Standard Toolkit version 2.2	Gold Standard
31	Intergovernmental Panel on Climate Change	IPCC Guidelines ^{/IPCC/}	1996 IPCC Guidelines for National Greenhouse Gas Inventories: work book 2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book	www.ipcc-nggip.iges.or.jp
32	National Standard	Power metering device calibration standards ^{/JJG/}	Power metering device calibration standards (SD109-83) and verification regulation of electric watt-hour meters (JJG596-1999)	National Standard Website http://gb-china.cn/

No	Author	Title	References to the document	Provider
33	UNFCCC	Kyoto Protocol ^{/KP/}	Kyoto Protocol (1997)	UNFCCC
34	UNFCCC	Marrakesh – Accords ^{/MA/}	Decision 3/CMP. 1 (Marrakesh – Accords)	UNFCCC
35	UNFCCC	Monitoring Report Form ^{/MRF/}	CDM Monitoring Report Form (F-CDM-MR), Version 05.1	UNFCCC
36	National Standard	Technical administration code of meter ^{/DLT/}	DL/T 448-2000 technical administration code of electricity energy metering	National Standard Website http://gb-china.cn/
37	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.	Project Design Document ^{/PDD/}	Registered Project Design Document for GS-VER project: “The CDQ Project in Tranvic Group” version 04, dated 20/03/2014.	Gold Standard
38	On-site Verification Team	Photographs of Project Site ^{/PHT/}	Photographs of power plant site, Central Control Room, DCS System, all the meters and nameplate of the equipments taken by Verification team during the on-site verification	On-site Verification Team
39	UNFCCC	Project Standard ^{/PS/}	CDM Project Standard (Version 09.0)	UNFCCC
40	Sichuan Provincial Statistic Bureau	Sichuan Statistic Yearbook ^{/SSY/}	Sichuan Statistic Yearbook 2014	http://www.sc.stats.gov.cn/tjcbw/tjnj/2014/index.htm
41	TUV Rheinland (China) Ltd.	Validation Report ^{/VAL/}	Validation Report for GS project “The CDQ Project in Tranvic Group” Version 03.0, 20/03/2014	Gold Standard
42	UNFCCC	Verification Reports ^{/VER/}	Previous verification: MRs and Verification Reports Refer to https://mer.markit.com/br-reg/public/project.jsp?project_id=103000000005109	Gold Standard
43	UNFCCC	Validation and Verification Standard ^{/VVS/}	CDM Validation and Verification Standard (Version 09.0)	UNFCCC
44	-	DNA of China ^{/dna/}	www.cdm.ccchina.gov.cn	Website
45	Gold Standard Organization	Gold Standard ^{/gs/}	http://www.goldstandard.org/	Website
46	IPCC	IPCC publications ^{/ipcc/}	www.ipcc-nggip.iges.or.jp	Website
47	Ministry of Environmental Protection of China	Environmental Protection ^{/mepc/}	http://www.zhb.gov.cn/	Website
48	UNFCCC	UNFCCC ^{/unfccc/}	http://cdm.unfccc.int	Website

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

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

FAR ID		Section no.		Date:
Description of FAR				
Project participant response (1st round)				Date:
Documentation provided by project participant (1st round)				
☐	Changes in the PDD	Section(s):	New version No.:	
☐	Changes in MR	Section(s):	New version No.:	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
DOE assessment (1st round)				Date:
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☐ The finding is closed		

Table 2. CL from this verification

CL ID	1	Section no.	C	Date: 14/10/2016
Description of CL				
It is observed that in section C of the MR, the data collection procedure, emergency procedure is missing, and the QA/QC procedure is not detail described.				
Project participant response (1st round)				
Section C of the MR (version 02), the data collection procedure, emergency procedure and the QA/QC procedure is detail described. Some description were added to the MR (version 02), please see the detailed in page 7 and 8 of MR.				
Data Collection				
Particular staff assigned by the project owner is responsible to collect, record and document all the related monitoring records. All the electricity meters measure electric quantity continuously, and the data will be recorded at 24:00 of every week.				
Quality Assurance and Quality Control				
The quality assurance and quality control procedures consist of data recording; maintaining and archiving. The quality assurance and quality control procedures should be improved according to the related regulation and the real operating conditions during the project operation period.				
Particular QC staff will be appointed by the project owner to take the overall responsibility of calibrating monitoring equipments, managing and processing the monitored data. If something unusual occurs, the project manager should be immediately reported.				
Emergency procedure				
For electricity monitoring, if the meters are not within acceptable limits of accuracy or are performing improperly, then the electricity supplied and imported will not be calculated, the emission reductions in the period will not be claimed. And the broken meter will be fixed in time.				
Documentation provided by project participant (1st round)				Date: 21/10/2016
☐	Changes in the PDD	Section(s):	New version No.:	
☒	Changes in MR	Section(s): C	New version No.: 02	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☒	Other:	/MM/, /QAQC/, /CAL/, /LOG/		
DOE assessment (1st round)				Date: 03/11/2016

The revised MR is checked. Via further checking the Monitoring Manual ^{/MM/} , QA/QC procedures ^{/QAQC/} , Calibration Certificates ^{/CAL/} and related LOG ^{/LOG/} against the PD description, it is confirmed that the data collection procedure, emergency procedure and the QA/QC procedure is correctly illustrated and in line with the actual situation of the project activity.			
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CL ID	2	Section no.	C	Date: 14/10/2016
Description of CL				
It is observed that in section C of the MR, the description of monitoring system for sustainable development indicators is not illustrated.				
Project participant response (1st round)				
The related information is added to the MR. There are five monitored sustainable development indicators, that is, air quality, water quantity, quality of employment, quantitative employment and income generation, and other pollutants. The detailed description of monitoring system for sustainable development indicators can be seen in Section D.				
Documentation provided by project participant (1st round)				Date: 21/10/2016
☐	Changes in the PDD	Section(s):	New version No.:	
☒	Changes in MR	Section(s): C	New version No.: 02	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
DOE assessment (1st round)				Date: 03/11/2016
The revised MR is checked, the relevant description of monitoring system for sustainable development indicators is added, and the details of SD monitoring has been confirmed as listed in section D. Refer to the section D.6.2.2 of this report for detail assessments of sustainable development indicators.				
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

Table 3. CAR from this verification

CAR ID	1	Section no.	Cover Page	Date: 14/10/2016
Description of CAR				
In the cover page of the MR, the following findings are observed: 1. The project is a GS project, while the form indicates UNFCCC reference number. 2. Sectoral scopes are not complete.				
Project participant response (1st round)				
1 The word "UNFCCC" was deleted from the cover page. 2 Sectoral scopes was added to the form.				
Documentation provided by project participant (1st round)				Date: 21/10/2016
☐	Changes in the PDD	Section(s):	New version No.:	
☒	Changes in MR	Section(s): Cover Page	New version No.: 02	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
DOE assessment (1st round)				Date: 03/11/2016
1. The MR is confirmed as revised and correct. 2. The Sectoral scopes has been confirmed as complete according to the applied methodology.				
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CAR ID	2	Section no.	A.1	Date: 14/10/2016
Description of CAR				
It is observed that this monitoring period started from 10/03/2014, and the project was registered as a GS project on 10/03/2014, however it stated in the MR that this monitoring period is retroactive.				
Project participant response (1st round)				
The retroactive information is deleted from the MR (version 02). It's the written mistake.				

Documentation provided by project participant (1st round)		Date: 21/10/2016
☐ Changes in the PDD	Section(s):	New version No.:
☒ Changes in MR	Section(s): A.1	New version No.: 02
☐ Changes in XLS	Worksheet(s):	New version No.:
☐ Other:		
DOE assessment (1st round)		Date: 03/11/2016
The MR is confirmed as revised and correct. This monitoring period is confirmed as not retroactive.		
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	3	Section no.	A.5	Date: 14/10/2016
Description of CAR				
It is observed that the crediting period described in section A.5 is not in line with the 1 st monitoring period MR information.				
Project participant response (1st round)				
10 years fixed crediting period is adopted by the project. The crediting period of the project activity is from 13/05/2013 to 12/05/2023.				
The information was revised in the MR (version 02).				
Documentation provided by project participant (1st round)				Date: 21/10/2016
☐ Changes in the PDD	Section(s):		New version No.:	
☒ Changes in MR	Section(s): A.5		New version No.: 02	
☐ Changes in XLS	Worksheet(s):		New version No.:	
☐ Other:				
DOE assessment (1st round)				Date: 03/11/2016
The MR is confirmed as revised and correct. The crediting period of the project activity is confirmed as from 13/05/2013 to 12/05/2023 via checking the 1 st monitoring period MR and verification report.				
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	4	Section no.	B.1	Date: 14/10/2016
Description of CAR				
In the section B.1 of the MR, the following findings are observed:				
- It is observed that the operation date is not consistent with section A. - Major technical parameters of the key equipments employed by the project are not complete. Some key information is missing. - It is observed that there is no power supplied for captive use during period from 19/02/2016 to 03/03/2016, the reason is missing in B.1.				
Project participant response (1st round)				
- A Typo. In section B.1 the date is revised to be consistent with section A. - Major technical parameters of the key equipments employed by the project has been added to be complete. - The reason about no power generation from 19/02/2016 to 03/03/2016 was added to the MR (version 02).				
Documentation provided by project participant (1st round)				Date: 21/10/2016
☐ Changes in the PDD	Section(s):		New version No.:	
☒ Changes in MR	Section(s): B.1		New version No.: 02	
☐ Changes in XLS	Worksheet(s):		New version No.:	
☒ Other:	/DHOR/, /TP/, /LOG/, /EBS/, /MRR/			
DOE assessment (1st round)				Date: 03/11/2016
- The operation date is confirmed as correct via checking the the Daily Handing Over Record^{/DHOR/} against the previous verification report^{/VER/} and in line with section A. - The major technical parameters of the key equipments are checked added into the revised MR. Via checking the nameplate of equipments^{/PHT/} and the Technical Particulars for main equipments^{/TP/}, it is confirmed that the technical parameters information is correct. - The revised MR is checked, it is confirmed that the reason of no power generation from 19/02/2016 to 03/03/2016 is added. Through cross-checking the LOG^{/LOG/}, Electricity Balance sheets^{/EBS/} and the Meter Reading Records^{/MRR/}, it is verified that from 19/02/2016 to 03/03/2016, the equipments were under regular maintaining^{/LOG/}, hence, no electricity generated^{/MRR/} and no ER is claimed during these period^{/XLS/}.				

Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed
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CAR ID	5	Section no.	D.2	Date:	14/10/2016	
Description of CAR						
It is observed that $EG_{PJ,y}$, $EC_{PJ,i,y}$, $Q_{OE,y}$ parameters tables in section D.2, the meter information of M2, such as the meter type and validity is not correct.						
Project participant response (1st round)						
The information about the meter type and validity are revised in MR (version 02).						
The monitoring meter M2: Type: PA6000-12 Accuracy class: 0.5% Serial number: 12040254 Calibration frequency: annually Previous calibration date: 19/01/2014, 05/01/2015, 04/01/2016 Validity: 19/01/2014 – 03/01/2017 The monitoring meter M3: Type: PD 6000 Accuracy class: level 0.5% Serial number: 12070107 Calibration frequency: annually Previous calibration date: 19/01/2014, 05/01/2015, 04/01/2016 Validity: 19/01/2014 – 03/01/2017 The monitoring meter M1: Type: DSSD25 Accuracy class: 0.2S Serial number: D1165647 Calibration frequency: annually Previous calibration date: 19/01/2014, 05/01/2015, 04/01/2016 Validity: 19/01/2014 – 03/01/2017						
Documentation provided by project participant (1st round)					Date:	21/10/2016
☐	Changes in the PDD	Section(s):	New version No.:			
☒	Changes in MR	Section(s): D.2	New version No.: 02			
☐	Changes in XLS	Worksheet(s):	New version No.:			
☒	Other:	/CAL/				
DOE assessment (1st round)					Date:	03/11/2016
The information of meters M1, M2 and M3 is checked as complete in the revised MR.						
Via checking the nameplate of the meters ^{/PHT/} and the calibration certificate ^{/CAL/} , it is verified that the information is correct and the validity is covering this monitoring period.						
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed				

CAR ID	6	Section no.	E.1	Date:	14/10/2016	
Description of CAR						
It is observed that in section E.1,						
1. The description of the parameters are not in line with the PDD and not consistent with other parts of the MR.						
2. The reason of $EG_{PJ,y}$ is 0 from 19/02/2016 to 03/03/2016 is not illustrated.						
Project participant response (1st round)						
1. The description of the parameters are revised, and now it is in line with the PDD.						
2. During the period of 02/19/2016 – 03/03/2016, the equipment of the project was in regular servicing, so there is no electricity. And the reason of $EG_{PJ,y}$ from 19/02/2016 to 03/03/2016 is illustrated in MR (version 02).						
Documentation provided by project participant (1st round)					Date:	21/10/2016
☐	Changes in the PDD	Section(s):	New version No.:			
☒	Changes in MR	Section(s): E.1	New version No.: 02			
☐	Changes in XLS	Worksheet(s):	New version No.:			

☒ Other:	
DOE assessment (1st round)	Date: 03/11/2016
1. The revised MR is checked, it is confirmed that the description of the parameters are in line with the PDD and consistent with other parts of the MR. 2. The reason is illustrated in section E.1. For the assessment of the reason, refer to CAR 4.	
Conclusion Tick the appropriate checkbox	☐ Additional action should be taken (finding remains open) ☒ The finding is closed

Table 4. FAR from this verification

FAR ID	xx	Section No.		Date: DD/MM/YYYY
Description of FAR				
Project participant response				Date: DD/MM/YYYY
Documentation provided by project participant				
☐ Changes in the PDD	Section(s):		New version No.:	
☐ Changes in MR	Section(s):		New version No.:	
☐ Changes in XLS	Worksheet(s):		New version No.:	
☐ Other:				
DOE assessment				Date: DD/MM/YYYY
Conclusion Tick the appropriate checkbox	☐ To be checked during the next periodic verification			

Appendix 5. Monitored Parameters

Table A-5: Periodic Verification Checklist – Monitored Parameters

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
A. $EG_{PJ,y}$		Quantity of net electricity generation supplied by the project for captive use		
a) Measurement / Determination method (VVS, §§ 389-393) Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level but also describe the applied data aggregation trails (from ODL to data aggregation level zero). Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements. Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.	/I1/ /LOG/ /MM/ /MR/ /MRR/ /O&M/ /PWD/ /ACM001 2/ /PDD/ /PS/ /EBS/	<i>Description:</i> Meter M2 is installed at the JH905 cabinet to record the quantity of net electricity generation supplied by the project for captive use $EG_{PJ,y}$. $EG_{PJ,y}$ is continuously measured and at least monthly recording. The relevant electricity balance sheet issued by the project owner and used for ER calculation is derived from meter M2. The data aggregation procedure applied by the project owner is shown as follow: 1. $EG_{PJ,y}$ is monitored by M2, the operators read the value from the Meters daily. Based on the difference between the two meter values on each day, the value of that day is determined. Accordingly the operator issues the daily records. The daily reports record the $EG_{PJ,y}$ per day (DAL-2=ODL). 2. Based on the daily reports for a period less than one month, the operators issues a corresponding period report. The sum of the $EG_{PJ,y}$ per day is the final result as shown in the period report (DAL-1). 3. Based on the period reports, the final period (less than one month) value was reported in the monitoring report (DAL0). <i>Verifier's action:</i> By means of comparing the MR with registered PDD and applied methodology ACM0012 as well as crosschecking the real	CAR-5	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		monitoring records and emission reduction spreadsheet during onsite visit. The reported value in the MR (DAL0) has been recalculated by the verification team based on the values from the period reports (DAL-1). Based on period reports and the underlying original data (ODL), the verification team calculated the data aggregation completely independent from the calculation provided by the PP. 100% of the daily and period reports have been verified. <i>Conclusion:</i> The measurement method of $EG_{PJ,y}$ is in line with the registered PDD and applied methodology. However, CAR 5 was raised.		
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) <i>In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.</i> <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance. Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.</i>	/I1/ /CAL/ /CMA/ /DLT/ /JJG/ /LOG/ /MM/ /MR/ /MRR/ /O&M/ /PWD/ /ACM001 2/ /PDD/ /PS/	<i>Description:</i> The quantity of net electricity generation supplied by the project for captive use $EG_{PJ,y}$ was measured continuously by M2 with accuracy 0.5% at the JH905 cabinet. The meter calibrations are performed yearly by the qualified third party according to national standard^{/DLT/}. Based on the continuous metering at the JH905 cabinet, the data is recorded daily and issued less than monthly by the project owner. <i>Verifier's action:</i> By means of checking the MR, the registered PDD, electricity balance sheet, daily electric records, the calibration records and certificates of the calibration entity. The meter calibration records covering the monitoring period were available during the onsite verification and have been checked. <i>Conclusion:</i> The accuracy of M2 is 0.5% and meets the applied national standard (DL/T448-2000). The meter was in normal operation	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
	/EBS/	conditions during this monitoring period. No problems regarding the meter accuracy occurred during the monitoring period. The calibration reports are deemed appropriate. The entity that calibrated the monitoring equipment is adequately authorized/ licensed by the Government and the calibration is carried out by competent personnel.		
c) Correctness (VVS, §§ 389-393) <i>Determine whether the value given in the monitoring report is correct or determined in a conservative manner.</i> <i>In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.</i> <i>In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</i>	/EBS/ /LOG/ /MR/ /MRR/ /QAQC/ /TCR/ /XLS/ /ACM001 2/ /PS/	☒ Correct ☐ Not correct (Initial assessment) <i>Description:</i> The value mentioned in the monitoring report is in line with the Electricity balance sheet and Daily Electricity Meter Reading Records. Daily operation logs were used for cross-check, the conservative value is used for ER calculation. <i>Verifier's action:</i> By means of checking the meter record, daily log (manual record) and electricity balance sheet comparing/recalculating with the emission reduction calculation sheet. <i>Conclusion:</i> The value is correct.	OK	OK
B. $EC_{PJ,jy}$		The additional power consumed in year y as a result of the implementation of the project activity source j		
a) Measurement / Determination method (VVS, §§ 389-393) <i>Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level but also describe the applied data aggregation trails (from ODL to data aggregation level zero).</i> <i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used.</i> <i>Furthermore, verify the frequency of measurements as per the requirements.</i>	/I1/ /LOG/ /MM/ /MR/ /MRR/ /O&M/ /PWD/	<i>Description:</i> Meter M3 is installed at the JH906 cabinet to record the additional power consumed in year y as a result of the implementation of the project activity source j $EC_{PJ,j,y}$. $EC_{PJ,j,y}$ is continuously measured and at least monthly recording. The relevant electricity balance sheet issued by the project owner and used for ER calculation is derived from meter M3. The data aggregation procedure applied by the project owner is shown as follow:	CAR5	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.	/ACM001 2/ /PDD/ /PS/ /EBS/	1. $EC_{PJ,j,y}$ is monitored by M3, the operators read the value from the Meters daily. Based on the difference between the two meter values on each day, the value of that day is determined. Accordingly the operator issues the daily records. The daily reports record the $EC_{PJ,j,y}$ per day (DAL-2=ODL). 2. Based on the daily reports for a period less than one month, the operators issues a corresponding period report. The sum of the $EC_{PJ,j,y}$ per day is the final result as shown in the period report (DAL-1). 3. Based on the period reports, the final period (less than one month) value was reported in the monitoring report (DAL0). <i>Verifier's action:</i> By means of comparing the MR with registered PDD and applied methodology ACM0012 as well as crosschecking the real monitoring records and emission reduction spreadsheet during onsite visit. The reported value in the MR (DAL0) has been recalculated by the verification team based on the values from the period reports (DAL-1). Based on period reports and the underlying original data (ODL), the verification team calculated the data aggregation completely independent from the calculation provided by the PP. 100% of the daily and period reports have been verified. <i>Conclusion:</i> The measurement method of $EC_{PJ,j,y}$ is in line with the registered PDD and applied methodology. However, CAR 5 was raised.		
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that	/I1/ /CAL/ /CMA/ /DLT/	<i>Description:</i> The additional power consumed in year y as a result of the implementation of the project activity source j $EC_{PJ,j,y}$ was measured continuously by M3 with accuracy 0.5% at the JH906 cabinet.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>the most conservative assumptions theoretically possible have been made for calculating ERs.</i> <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance. Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.</i>	/JJG/ /LOG/ /MM/ /MR/ /MRR/ /O&M/ /PWD/ /ACM001 2/ /PDD/ /PS/ /EBS/	The meter calibrations are performed yearly by the qualified third party according to national standard^{/DLT/}. Based on the continuous metering at the JH906 cabinet, the data is recorded daily and issued less than monthly by the project owner. <i>Verifier's action:</i> By means of checking the MR, the registered PDD, electricity balance sheet, daily electric records, the calibration records and certificates of the calibration entity. The meter calibration records covering the monitoring period were available during the onsite verification and have been checked. <i>Conclusion:</i> The accuracy of M3 is 0.5% and meets the applied national standard (DL/T448-2000). The meter was in normal operation conditions during this monitoring period. No problems regarding the meter accuracy occurred during the monitoring period. The calibration reports are deemed appropriate. The entity that calibrated the monitoring equipment is adequately authorized/ licensed by the Government and the calibration is carried out by competent personnel.		
c) Correctness (VVS, §§ 389-393) <i>Determine whether the value given in the monitoring report is correct or determined in a conservative manner. In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given. In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</i>	/EBS/ /LOG/ /MR/ /MRR/ /QAQC/ /TCR/ /XLS/	☒ Correct ☐ Not correct (Initial assessment) <i>Description:</i> The value mentioned in the monitoring report is in line with the Electricity balance sheet and Daily Electricity Meter Reading Records. Daily operation logs were used for cross-check, the conservative value is used for ER calculation. <i>Verifier's action:</i>	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
	/ACM001 2/ /PS/	By means of checking the meter record, daily log (manual record) and electricity balance sheet comparing/recalculating with the emission reduction calculation sheet. <i>Conclusion:</i> The value is correct.		
C. $Q_{OE,y}$		Quantity of actual output energy during year y, i.e. the total power generation of the power plant		
a) Measurement / Determination method (VVS, §§ 389-393) Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level but also describe the applied data aggregation trails (from ODL to data aggregation level zero). Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements. Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.	/11/ /LOG/ /MM/ /MR/ /MRR/ /O&M/ /PWD/ /ACM001 2/ /PDD/ /PS/ /EBS/	<i>Description:</i> Meter M1 is installed at the outlet side of the generator to measure the quantity of actual output energy during year y, i.e. the total power generation of the power plant $Q_{OE,y}$. $Q_{OE,y}$ is continuously measured and at least monthly recording. The relevant electricity balance sheet issued by the project owner and used for ER calculation is derived from meter M1. The data aggregation procedure applied by the project owner is shown as follow: 1. $Q_{OE,y}$ is monitored by M1, the operators read the value from the Meters daily. Based on the difference between the two meter values on each day, the value of that day is determined. Accordingly the operator issues the daily records. The daily reports record the $Q_{OE,y}$ per day (DAL-2=ODL). 2. Based on the daily reports for a period less than one month, the operators issues a corresponding period report. The sum of the $Q_{OE,y}$ per day is the final result as shown in the period report (DAL-1). 3. Based on the period reports, the final period (less than one month) value was reported in the monitoring report (DAL0). <i>Verifier's action:</i>	GAR-5	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		By means of comparing the MR with registered PDD and applied methodology ACM0012 as well as crosschecking the real monitoring records and emission reduction spreadsheet during onsite visit. The reported value in the MR (DAL0) has been recalculated by the verification team based on the values from the period reports (DAL-1). Based on period reports and the underlying original data (ODL), the verification team calculated the data aggregation completely independent from the calculation provided by the PP. 100% of the daily and period reports have been verified. <i>Conclusion:</i> The measurement method of $Q_{OE,y}$ is in line with the registered PDD and applied methodology. However, CAR 5 was raised.		
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) <i>In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.</i> <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance. Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.</i>	/I1/ /CAL/ /CMA/ /DLT/ /JJG/ /LOG/ /MM/ /MR/ /MRR/ /O&M/ /PWD/ /ACM001 2/	<i>Description:</i> The quantity of actual output energy during year y, i.e. the total power generation of the power plant $Q_{OE,y}$ was measured continuously by M1 with accuracy 0.2s at the outlet side of the generator. The meter calibrations are performed yearly by the qualified third party according to national standard^{/DLT/}. Based on the continuous metering at the outlet side of the generator, the data is recorded daily and issued less than monthly by the project owner. <i>Verifier's action:</i> By means of checking the MR, the registered PDD, electricity balance sheet, daily electric records, the calibration records and certificates of the calibration entity. The meter calibration records covering the monitoring period were available during the onsite verification and have been checked.	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
	/PDD/ /PS/ /EBS/	<i>Conclusion:</i> The accuracy of M1 is 0.2s and meets the applied national standard (DL/T448-2000). The meter was in normal operation conditions during this monitoring period. No problems regarding the meter accuracy occurred during the monitoring period. The calibration reports are deemed appropriate. The entity that calibrated the monitoring equipment is adequately authorized/ licensed by the Government and the calibration is carried out by competent personnel.		
c) Correctness (VVS, §§ 389-393) <i>Determine whether the value given in the monitoring report is correct or determined in a conservative manner.</i> <i>In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.</i> <i>In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</i>	/EBS/ /LOG/ /MR/ /MRR/ /QAQC/ /TCR/ /XLS/ /ACM001 2/ /PS/	☒ Correct ☐ Not correct (Initial assessment) <i>Description:</i> The value mentioned in the monitoring report is in line with the Electricity balance sheet and Daily Electricity Meter Reading Records. Daily operation logs were used for cross-check, the conservative value is used for ER calculation. <i>Verifier's action:</i> By means of checking the meter record, daily log (manual record) and electricity balance sheet comparing/recalculating with the emission reduction calculation sheet. <i>Conclusion:</i> The value is correct.	OK	OK
D. $TDL_{j,y}$		Average technical transmission and distribution losses for providing electricity to source j in year y		
a) Measurement / Determination method (VVS, §§ 389-393) <i>Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level but also describe the applied data aggregation trails (from ODL to data aggregation level zero).</i>	/SCPS/ /PDD/ /MR/ /ACM001 2/	<i>Description:</i> The parameter is determined by checking the most recent available Statistics Collections for Power Sector issued by China Electricity Council annually. During this monitoring period, the parameter is sourced from 2011 Statistics Collections for Power Sector issued by China Electricity	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.</i> <i>Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.</i>		Council issued in 07/2012 which is confirmed as most recent available and valid during this monitoring period. <i>Verifier's action:</i> By means of checking the checking the most recent available Statistics Collections for Power Sector issued by China Electricity Council, i.e. 2011 Statistics Collections for Power Sector issued by China Electricity Council issued in 07/2012. <i>Conclusion:</i> The measurement and determination are in line with the latest approved PDD and the applied methodology. No issues have been identified.		
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) <i>In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.</i> <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance. Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.</i>	/SCPS/ /PDD/ /MR/ /ACM001 2/	<i>Description:</i> The parameter is determined by checking the most recent available Statistics Collections for Power Sector issued by China Electricity Council annually. In the absence of data from the relevant year, most recent figures should be used, but not older than 5 years. During this monitoring period, the parameter is sourced from 2011 Statistics Collections for Power Sector issued by China Electricity Council issued in 07/2012 which is confirmed as most recent available and valid during this monitoring period. <i>Verifier's action:</i> By means of checking the checking the most recent available Statistics Collections for Power Sector issued by China Electricity Council, i.e. 2011 Statistics Collections for Power Sector issued by China Electricity Council issued in 07/2012. <i>Conclusion:</i> The applicable QA/QC procedures are met.	OK	OK
c) Correctness	/SCPS/	☒ Correct ☐ Not correct (Initial assessment)	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
(VVS, §§ 389-393) Determine whether the value given in the monitoring report is correct or determined in a conservative manner. In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given. In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.	/PDD/ /MR/ /ACM001 2/	Description: The value applied in the MR is 9.36%. Verifier's action: By means of checking the most recent available Statistics Collections for Power Sector issued by China Electricity Council, i.e. 2011 Statistics Collections for Power Sector issued by China Electricity Council issued in 07/2012. Conclusion: The value applied is correct.		
E. 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		
a) Measurement / Determination method (VVS, §§ 389-393) Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level but also describe the applied data aggregation trails (from ODL to data aggregation level zero). Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements. Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.	/LOG/ /MRR/ /PDD/ /MR/ /ACM001 2/ /11/	Description: The parameter is determined through operation situation from operation logs, plant accident log including accident and machine halt. Verifier's action: By means of checking operation logs, plant accident log including accident and machine halt. Conclusion: The measurement and determination are in line with the latest approved PDD and the applied methodology. No issues have been identified.	OK	OK
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if	/LOG/ /MRR/ /PDD/ /MR/	Description: 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 abnormality can be in terms	OK	OK

Checklist Item (incl. guidance for the verification team)	Reference	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
<i>significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.</i> <i>Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance. Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.</i>	/ACM001 2/ /I1/	of violation of operational parameters, poor quality product, emergencies or shutdown. <i>Verifier's action:</i> By means of checking operation logs, plant accident log including accident and machine halt. <i>Conclusion:</i> The applicable QA/QC procedures are met.		
c) Correctness (VVS, §§ 389-393) <i>Determine whether the value given in the monitoring report is correct or determined in a conservative manner.</i> <i>In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.</i> <i>In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.</i>	/LOG/ /MRR/ /PDD/ /MR/ /ACM001 2/ /I1/	☒ Correct ☐ Not correct (Initial assessment) <i>Description:</i> During this monitoring period, there is no abnormal operation, hence value applied is 0. <i>Verifier's action:</i> By means of checking operation logs, plant accident log including accident and machine halt. <i>Conclusion:</i> The value applied is correct.	OK	OK

Appendix 6. Calibration dates and validity of installed monitoring equipment

Monitoring equipment	Related monitoring parameter as per applicable registered monitoring plan	Serial number	Type	Accuracy or accuracy class	Previous calibration (last calibration before start of this monitoring period)	Calibration date(s) during this monitoring period	Validity of calibration (s)	Delay in calibration: yes/no	Period of delayed calibration
M2	$EG_{PJ,y}$	12040254	PA6000-12	0.5%	19/01/2014	05/01/2015 04/01/2016	19/01/2014- 03/01/2017	☒ No ☐ Yes	From: To:
M3	$EC_{PJj,y}$	12070107	PD6000	0.5%	19/01/2014	05/01/2015 04/01/2016	19/01/2014- 03/01/2017	☒ No ☐ Yes	From: To:
M1	$GEN_{1,y}$ $GEN_{2,y}$	D1165647	DSSD25	0.2s	19/01/2014	05/01/2015 04/01/2016	19/01/2014- 03/01/2017	☒ No ☐ Yes	From: To: