



**Monitoring report form
(Version 05.1)**

MONITORING REPORT		
Title of the project activity	The CDQ Project in Tranvic Group	
Reference number of the project activity	GS2460	
Version number of the monitoring report	03	
Completion date of the monitoring report	26/12/2016	
Monitoring period number and duration of this monitoring period	2 nd monitoring period (10/03/2014-31/05/2016, first and last days included)	
Project participant(s)	Neijiang Bowei Xinyu Chemical Industry Co., Ltd.(project owner) Carbon Invcap International Trading Co., Ltd. (buyer)	
Host Party	People's Republic of China	
Sectoral scope(s)	01Energy industries (renewable - / non-renewable sources); 04 Manufacturing industries	
Selected methodology(ies)	ACM0012 (version 04.0.0) – Consolidated baseline methodology for GHG emission reductions from waste energy recovery projects	
Selected standardized baseline(s)	N/A	
Estimated amount of GHG emission reductions or net GHG removals by sinks for this monitoring period in the registered PDD	342,165 tCO ₂ e	
Total amount of GHG emission reductions or net GHG removals by sinks achieved in this monitoring period	GHG emission reductions or net GHG removals by sinks reported up to 31 December 2012	GHG emission reductions or net GHG removals by sinks reported from 1 January 2013 onwards
	0	230,019tCO ₂ e

SECTION A. Description of project activity

A.1. Purpose and general description of project activity

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The purpose of the report is to calculate the emission reductions generated by The CDQ Project in Tranvic Group (thereafter referred to as the Project) during the monitoring period (10/03/2014-31/05/2016, including both days), and to serve as basis for the verification and issuance of corresponding GS VERs. The Project has been registered as a GSVER project on 10/03/2014 (GS registration reference number: GS2460).

The Project, is sited within the production area of Tranvic Group, Lianjie town, Weiyuan county, Neijiang city, Sichuan province, P.R. of China, owned by Neijiang Bowei Xinyu Chemical Industry Co., Ltd., the daughter company of Tranvic Group. The Project installed one set of 170t/h CDQ system with a capacity of 30MW steam turbine/generator unit to recover the waste heat released into the atmosphere in the absence of the project activity to generate electricity for captive use, and estimated annual net electricity supply amounts to 209,088MWh. The electricity generated by the Project displace electricity which would have been supplied by the operation of grid-connected power plants and by the addition of new generation sources within the Central China Power Grid (CCPG), which is the same as the baseline scenario of the project. By recovering the waste heat generated in coke production for captive use to displace the equivalent electricity generation by the CCPG, the project leads to the reduction of CO₂ emissions into the atmosphere. The project activity achieves average greenhouse gas (GHG) emission reductions of 153,428 tCO₂e annually.

The project utilizes the waste heat released into the atmosphere in the absence of the project activity to generate electricity. The electricity generated displaces electricity which would have been supplied by the CCPG which is dominated by fossil fuel fired power plants. The project scenario existing prior to the implementation of the project activity is same as the baseline scenario of the project, that is, coke wet quenching(CWQ) system is used and waste heat is released to the atmosphere.

Relevant dates for the Project are as follows:

Construction start date: 01/06/2012

Commissioning start date: 13/05/2013

Continued operation periods: 20 year

During the monitoring period (10/03/2014-31/05/2016, including both days), the net electricity supplied to Tranvic Group is 348,619.60MWh. The monitoring activities were conducted in accordance with the monitoring plan in the registered GS-PDD and the registered GS passport. The total emission reductions in this monitoring period (10/03/2014-31/05/2016, including both days) are 230,019 tCO₂e, for year 2014 are 68,580 tCO₂e, for year 2015 are 115,368 tCO₂e, and for year 2016 are 46,071 tCO₂e.

No RECs are being issued for the project under consideration for GS VERs.

A.2. Location of project activity

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The project is sited in Lianjie town, Weiyuan county, Neijiang city, Sichuan province, P.R. of China, with central geographical coordinates of east longitude of 104°29'05" and north latitude of 29°43'11".

A.3. Parties and project participant(s)

Party involved (host) indicates a host Party)	Private and/or public entity(ies) project participants (as applicable)	Indicate whether the Party involved wishes to be considered as project participant (yes/no)
People's Republic of China (Host)	Neijiang Bowei Xinyu Chemical Industry Co., Ltd. (Project owner)	No
United Kingdom of Great Britain and Northern Ireland	Carbon Invcap International Trading Co., Ltd. (Buyer)	No

A.4. Reference of applied methodology and standardized baseline

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The methodology applied for the Project is the approved consolidated baseline and monitoring 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) is employed for the calculation of emission factor.

The approved "Tool to calculate baseline, project and/or leakage emissions from electricity consumption" (version 01) is applied to calculate the project emission.

For more information about the methodology and tools, please refer to:
<http://cdm.unfccc.int/methodologies/PAmethodologies/approved.html>

A.5. Crediting period of project activity

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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.

A.6. Contact information of responsible persons/entities

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Dr. Zheng Zhaoning of Goldchina Consultancy International Co., Ltd. is responsible for completing the CDM-MR-FORM and the contact information is as follows:

Address: Room 304, 6th Building, Huaqing Jiayuan, Zhongguancun East Road, Haidian District, Beijing, P.R. of China (100083)

Telephone: (8610)6268 2682

Fax: (8610)6268 2682

Email: zzn01@mails.tsinghua.edu.cn, zzn@gcci-carbon.com

Website: www.gcci-carbon.com

The person/entity is not project participant listed in Annex 1.

SECTION B. Implementation of project activity

B.1. Description of implemented registered project activity

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The project started operation on 13/05/2013. The implementation of the project is not phased. During the period of 02/19/2016 – 03/03/2016, the equipment of the project was in regular maintaining, so there is no electricity. No equipment was exchanged or overhauled. No other events occurred that affected the applicability of the methodology. The Project owner implements and operates the Project as per the registered GS-PDD and GS passport.

Major technical parameters of the key equipments employed by the project are illustrated in Table 1.

Table 1. Major technical parameters of the key equipments of the Project

Main Technical Data			The project
Waste Heat Boiler	Type		Q270/970-108.3-9.8/540
	Unit		1
	Capacity		108.3 t/h
	Operational Life		20
	Manufacture		Hangzhou Boiler Group Co., Ltd.
Steam Turbine	Model		Condensing
	Type		N30-8.83
	Unit		1
	Rated Capacity		30MW
	Rated Speed		3000r/min
	Manufacture		Qingdao Jieneng Steam Turbine Group Co., Ltd.
Generator	Type		QF ₂ W-30-2
	Unit		1
	Rated Capacity		30MW
	Rated voltage		10,500V
	Rated frequency		50HZ
	Rated Power factor		0.8
	Operational Life		20
	Manufacture		Dongfang Electric Consortium Dongfeng Electric Machinery Co., Ltd.

B.2. Post-registration changes

B.2.1. Temporary deviations from registered monitoring plan, applied methodology or applied standardized baseline

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There is no temporary deviation from registered monitoring plan or applied methodology.

B.2.2. Corrections

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The project is implemented as the registered PDD and no corrections applied to this monitoring period.

B.2.3. Changes to start date of crediting period

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There is no change to start date of crediting period.

B.2.4. Inclusion of a monitoring plan to the registered PDD that was not included at registration

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Not applicable.

B.2.5. Permanent changes from registered monitoring plan, applied methodology or applied standardized baseline

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The project is implemented as the registered PDD and no permanent changes.

B.2.6. Changes to project design of registered project activity

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The project is implemented as the registered PDD and no changes.

B.2.7. Types of changes specific to afforestation or reforestation project activity

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Not applicable.

SECTION C. Description of monitoring system

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Monitoring system arrangement

Three meters M1, M2 and M3 were installed, and M1 meter measures the power generation of the Project, M2 meter measures quantity of net electricity generation supplied by the project for captive use, and M3 meter measure the self use electricity from the 10KV backup line.

The diagram of the technical process is shown in figure 1.

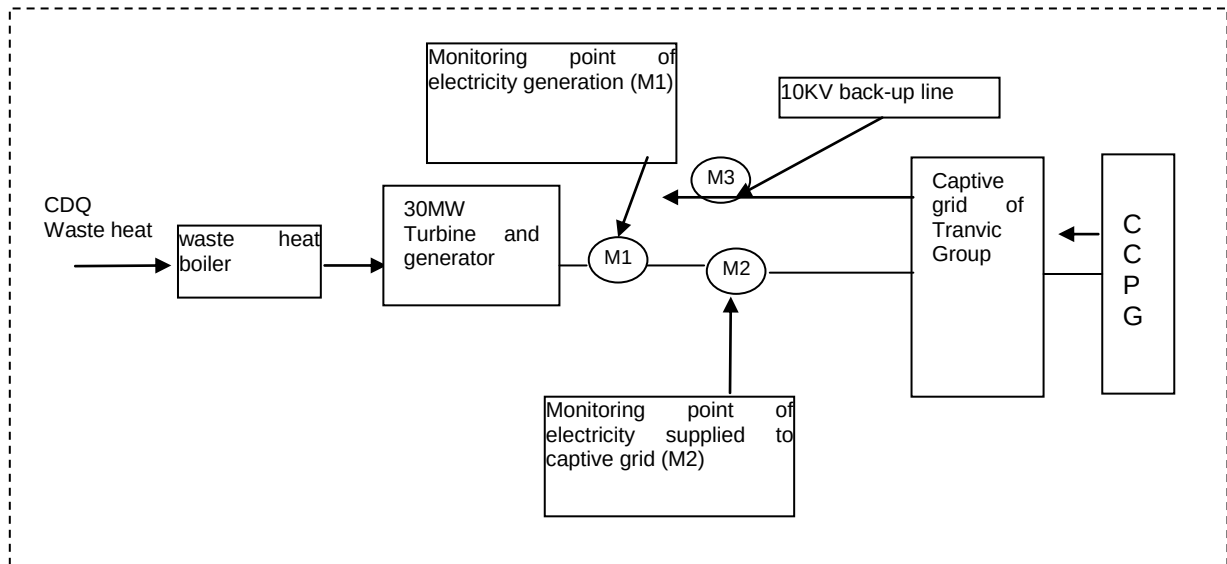


Figure1. The diagram of the monitoring system

* It is noted that the Project is sited with the production area of Tranvic Group, the Recipient facility. The electricity generated by the project was delivered to the captive grid of Tranvic Group, which covers the production area of Tranvic Group, including the Project. So, the electricity meters M1, M2 and M3 measure the electricity supplied to the recipient facility and from the project facility. So the electricity measurements satisfy the requirement of ACM0012.

Table 1. Major technical parameters of the key equipment of the project

meter	M1	M2	M3
Function	The meter of power generation	The meter of electricity supplied to the captive grid by the project	The meter of 10KV backup line
Parameter monitored	$Q_{OE,y}$	$EG_{PJ,y}$	$EC_{PJ,j,y}$
Accuracy	0.2S	0.5%	0.5%
Bi-direction	No	No	No
Location	outlet side of the generator	JH905 cabinet	JH906 cabinet

Management Structure

Detailed regarding the management structure of the monitoring plan please refers to Figure 2.

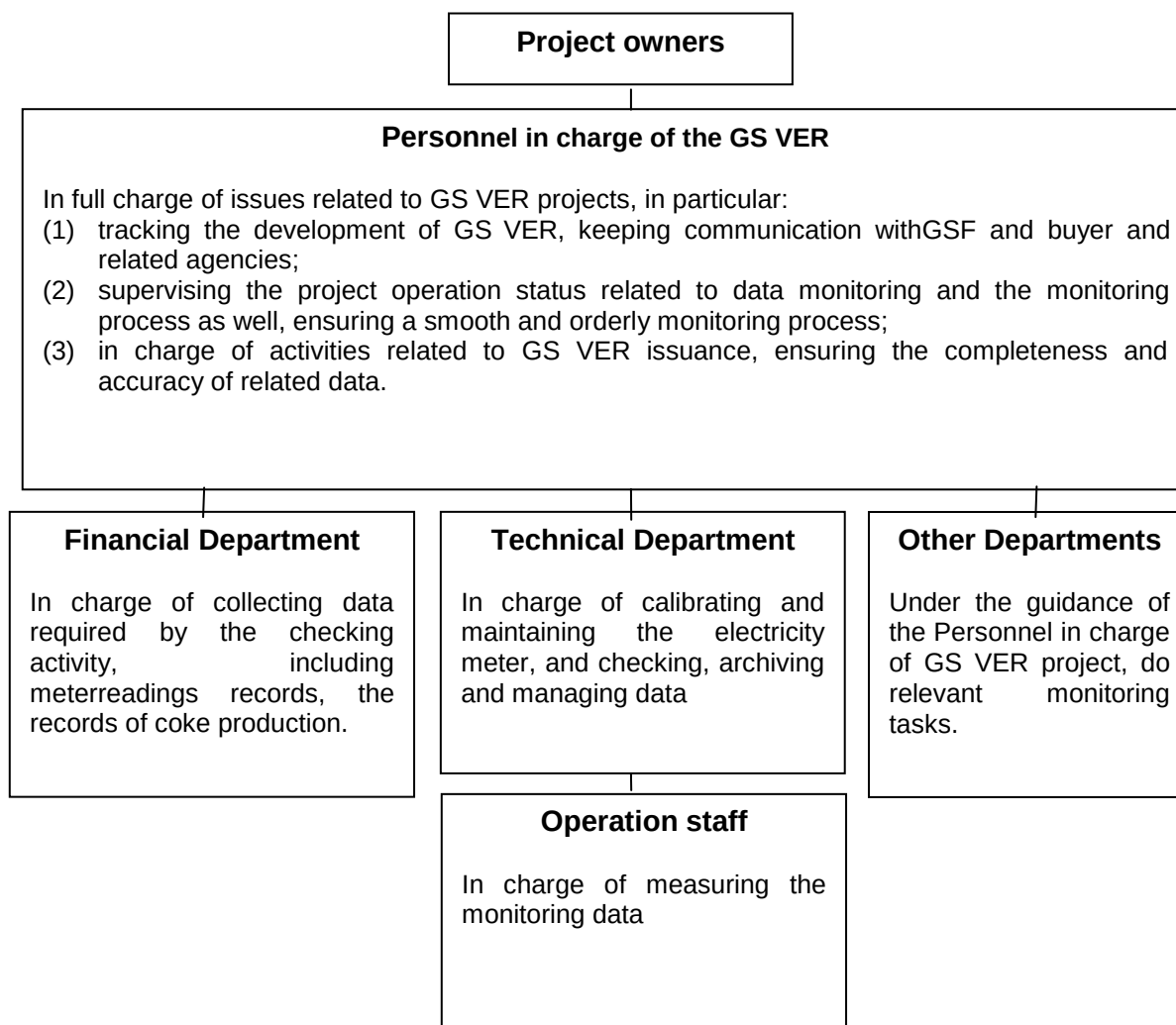


Figure 2. Management Structure of Monitoring Plan

Monitoring Measures

M1meter measures the power generation of the Project, M2 meter measures quantity of net electricity generation supplied by the project for captive use, and M3 meter measure the self-use electricity from the 10KV backup line.

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 is recorded at 24:00 in someday every week.

Installation of monitoring devices

The electricity meters of the Project were installed according to the *Technical Administrative Code of Electric Energy Metering* (DL/T 448-2000). Before the operation of the Project, the project ownerchecked and accepted those electricity meters as per the Technical Norm.

Calibration of Meters & Metering

The regular calibration and on-site verification should be implemented as per the Technical administrative code of electric energy metering (DL/T 448-2000) to ensure the precision of electricity meters. Electricity meters should be calibrated every year. After calibration, the electricity meters must be sealed.

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 is 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.

Data Management System

Specific staff will be appointed by the project owner to take on the overall responsibility for monitoring greenhouse gas emission reductions and keeping all the data collected as part of monitoring. Data shall be archived electronically and be kept at least for 2 years after the end of the last crediting period or the last issuance of VERs, whichever occurs later.

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 meters will be fixed in time.

Monitoring system for sustainable development indicators

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.

SECTION D. Data and parameters

D.1. Data and parameters fixed ex ante or at renewal of crediting period

Data/parameter:	$EF_{grid,CM,y}$
Unit	tCO ₂ e/MWh
Description	Combined Margin CO ₂ emission factor of CCPG in year y
Source of data	RegisteredGS-PDD
Value(s) applied	For first fixed crediting period: 0.7338
Choice of data or measurement methods and procedures	-
Purpose of data	Calculation of baseline emissions
Additional comments	This parameter is ex ante determined in GS-PDD and fixed during the fixed crediting periods.

Data/parameter:	f_{wcm}
Unit	-
Description	Fraction of total energy generated by the project activity using waste gas.
Measured/calculated/default	-
Source of data	Registered GS-PDD
Value(s) of monitored parameter	1
Monitoring equipment	-
Measuring/reading/recording frequency:	-
Calculation method (if applicable):	-
QA/QC procedures:	-
Purpose of data:	Calculation of baseline emissions
Additional comments:	This parameter is ex ante determined in PDD and fixed during the fixed crediting period.

Data/parameter:	f_{cap}
Unit	Fraction
Description	Energy that would have been produced in project year y using waste energy generated in base year expressed as a fraction of total energy produced using waste source in year y.
Measured/calculated/default	-
Source of data	Registered GS-PDD
Value(s) of monitored parameter	1
Monitoring equipment	-
Measuring/reading/recording frequency:	-
Calculation method (if applicable):	-
QA/QC procedures:	-

Purpose of data:	Calculation of baseline emissions
Additional comments:	The project entity 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.

Data/parameter:	$Q_{OE, BL}$
Unit	MWh
Description	Output/intermediate energy that can be theoretically produced, to be determined on the basis of maximum recoverable energy from the WECM, which would have been wasted in the absence of the project.
Measured/calculated/default	-
Source of data	Registered GS-PDD
Value(s) of monitored parameter	254,368.7999
Monitoring equipment	-
Measuring/reading/recording frequency:	-
Calculation method (if applicable):	-
QA/QC procedures:	-
Purpose of data:	Calculation of baseline emissions
Additional comments:	If the annual power generation is larger than the value, the f_{cap} must be re-calculated.

D.2. Data and parameters monitored

(Copy this table for each piece of data and parameter)

Data/parameter:	$EG_{PJ,y}$
Unit	MWh
Description	Quantity of net electricity generation supplied by the project for captive use
Measured/calculated/default	measured
Source of data	Directly measured by electricity meter (M2).
Value(s) of monitored parameter	348,619.60
Monitoring equipment	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
Measuring/reading/recording frequency:	The readings of electricity meter were continuously measured and at least monthly recorded. Data will be archived for 2 years following the end of the crediting period or the last issuance of ERs, whichever is later.
Calculation method (if applicable):	-
QA/QC procedures:	The electricity meters are calibrated regularly.
Purpose of data:	Calculation of baseline emissions
Additional comments:	-

Data/parameter:	$EC_{PJ,j,y}$
Unit	MWh
Description	The additional power consumed in year y as a result of the implementation of the project activity source j
Measured/calculated/default	measured
Source of data	Directly measured by electricity meter (M3) in the 10kV backup line.
Value(s) of monitored parameter	32,143.397
Monitoring equipment	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
Measuring/reading/recording frequency:	The readings of electricity meter were continuously measured and at least monthly recorded. Data will be archived for 2 years following the end of the crediting period or the last issuance of ERs, whichever is later.
Calculation method (if applicable):	-
QA/QC procedures:	The electricity meters will be calibrated regularly.
Purpose of data:	Calculation of baseline emissions
Additional comments:	-

Data/parameter:	$Q_{OE,y}$
Unit	MWh
Description	Quantity of actual output energy during year y, i.e. the total power generation of the power plant.
Measured/calculated/default	Measured
Source of data	Directly measured by electricity meter (M1) at the outlet of the generator
Value(s) of monitored parameter	364,741.5
Monitoring equipment	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
Measuring/reading/recording frequency:	The readings of electricity meter were continuously measured and at least monthly recorded. Data will be archived for 2 years following the end of the last crediting period or the last issuance of ERs, whichever is later.
Calculation method (if applicable):	-
QA/QC procedures:	Measuring equipment was calibrated annually.
Purpose of data:	Baseline emission calculations
Additional comments:	-

Data/parameter:	$TDL_{j,y}$
Unit	-

Description	Average technical transmission and distribution losses for providing electricity to source j in year y
Measured/calculated/default	measured
Source of data	http://www.cec.org.cn/yaowenkuaidi/2016-11-04/160608.html
Value(s) of monitored parameter	9.37%
Monitoring equipment	-
Measuring/reading/recording frequency:	Annually. In the absence of data from the relevant year, most recent figures should be used, but not older than 5 years.
Calculation method (if applicable):	-
QA/QC procedures:	-
Purpose of data:	Calculation of project emissions
Additional comments:	-

Data/parameter:	Abnormal operation of the project facility including emergencies and shut down
Unit	h
Description	The hours of abnormal operation of parts of project facility that can have an impact on waste energy generation and recovery
Measured/calculated/default	Operation of project facility
Source of data	-
Value(s) of monitored parameter	0
Monitoring equipment	Record the abnormal operation of project facility via plant accident log, including accident and machine halt.
Measuring/reading/recording frequency:	-
Calculation method (if applicable):	-
QA/QC procedures:	-
Purpose of data:	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 of violation of operational parameters, poor quality product, emergencies or shutdown.
Additional comments:	-

Data and parameters monitored for Gold Standard sustainable development indicators

No	1
Indicator	Air quality
Mitigation measure	Water sprinkling in the construction period Dust remove system in the operation period.
<i>Repeat for each parameter</i>	
Chosen parameter	The water sprinkling record, The local residential comments through interviewing, Dust remove system operation log.
Current situation of parameter	With the implementation of the Project, local air quality is significant improved.
Estimation of baseline situation of parameter	In the absence of the Project, the hot red coke would be quenched by CWQ system, which would result in much pollutants emission
Future target for parameter	Meet the requirements of air pollution emission criteria

Way of monitoring	How	Check the dust remove system operation log. Record local residential comments on the air quality.
	When	regularly measured and aggregated for each monitoring period
	By who	Monitored by the project owner
Result		The dust remove system was effectively operated, 39910.97t dust was collected in the monitoring period. local residential give higher positive comments on the air quality improvement. The spray water record, the dust remove system operation log and the questionnaire of impact on environment and community were provided for verification.
conclusion		In absence of the project activity, much dust and chemical pollutants such as benzene, pyrene and phenol etc., were emitted with the fog from CWQ. After the implementation of the project, the dust was effectively collected by dust remove system, and those chemical pollutants were eliminated.

No		2
Indicator		Water quantity
Mitigation measure		N/A as indicator scored positive.
Repeat for each parameter		
Chosen parameter		water consumption reduction against to the CWQ system
Current situation of parameter		1,028,829t industrial water was saved by the Project. Prior to the implementation of the project, the hot red coke was quenched by using water by CWQ system, the water consumption rate is 0.443t/t coke. With the implementation of the Project, the water consumption was effectively reduced.
Estimation of baseline situation of parameter		In the absence of the project, the hot red coke was quenched by using water by CWQ system, the water consumption rate is 0.443t/t coke
Future target for parameter		The quantity of water used for quenching coke will be significantly reduced.
Way of monitoring	How	the coke quenched by the project
	When	Continuously measured and aggregated for each monitoring period
	By who	Monitored by the project owner.
Result		2,322,412.805t coke were quenched by the CDQ system, the industrial water saving =2,322,412*0.443=1,028,829t
conclusion		With the implementation of the project, much industrial water was saved against the WDO system.

No	3
Indicator	Quality of employment
Mitigation measure	N/A as indicator scored positive.
<i>Repeat for each parameter</i>	
Chosen parameter	Training of staff.
Current situation of parameter	The staff has accepted a series of training on the technology and the monitoring of the plant operation, and the emergency and safety procedures.
Estimation of baseline situation of parameter	In the baseline, 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.
Future target for parameter	Together with the technology supplier, the Project organizes training for the staff on the technology and the monitoring of the plant operation, and the emergency and safety

		procedures.																																
Way of monitoring	How	The training records for all the employees																																
	When	Recorded monthly and aggregated for each monitoring period																																
	By who	Monitored by the project owner																																
Result		As per the training records of the Project, the staffs have accepted a series of training on the plant operation, Safety, emergency, and maintenance, which contributes to the quality of employment. . <table><tr><td>No</td><td>Time of the training</td><td>Training subject</td><td>Attendees</td></tr><tr><td>1</td><td>20/05/2014</td><td>Safe and emergency training</td><td>37 workers</td></tr><tr><td>2</td><td>01/06/2014</td><td>Safe and emergency training</td><td>35 workers</td></tr><tr><td>3</td><td>11/06/2014</td><td>Steam turbine-generator operation</td><td>28workers</td></tr><tr><td>4</td><td>23/04/2015</td><td>CDQ basis Technology theory</td><td>22 workers</td></tr><tr><td>5</td><td>22/07/2015</td><td>Operation Skill</td><td>29 workers</td></tr><tr><td>5</td><td>23/09/2015</td><td>Safe and emergency training</td><td>38workers</td></tr><tr><td>5</td><td>22/04/2016</td><td>Safe and emergency training</td><td>37 workers</td></tr></table> The training records and relevant certificates for employees of the Project are available on-site. The training records and relevant certificates for employees were provided to DOE for verification.	No	Time of the training	Training subject	Attendees	1	20/05/2014	Safe and emergency training	37 workers	2	01/06/2014	Safe and emergency training	35 workers	3	11/06/2014	Steam turbine-generator operation	28workers	4	23/04/2015	CDQ basis Technology theory	22 workers	5	22/07/2015	Operation Skill	29 workers	5	23/09/2015	Safe and emergency training	38workers	5	22/04/2016	Safe and emergency training	37 workers
No	Time of the training	Training subject	Attendees																															
1	20/05/2014	Safe and emergency training	37 workers																															
2	01/06/2014	Safe and emergency training	35 workers																															
3	11/06/2014	Steam turbine-generator operation	28workers																															
4	23/04/2015	CDQ basis Technology theory	22 workers																															
5	22/07/2015	Operation Skill	29 workers																															
5	23/09/2015	Safe and emergency training	38workers																															
5	22/04/2016	Safe and emergency training	37 workers																															
conclusion		The staffs of the project were trained on the technology and the monitoring of the plant operation, and the emergency and safety procedures. The training not only improves the operation level of the Project, and also enhances the technical skill of the staff.																																

No	4
Indicator	Quantitative employment and income generation
Mitigation measure	N/A as indicator scored positive.
<i>Repeat for each parameter</i>	
Chosen parameter	Number of jobs created in the operations of the Project and their salary levels.
Current situation of parameter	57persons have been employed. The average salary of the employee was CNY 38,276/year.
Estimation of baseline situation of parameter	In the baseline, local people have no such job opportunities from the Project, and their income has no increase. The average salary level in Neijiang City, Sichuan Province in year 2015 is CNY 31,313/year according to the 2016 Sichuan Statistical data

		(http://www.longchang.gov.cn/zwgk/show/20160928091335-169440-00-000), which is the most recent available data source.
Future target for parameter		Consistency in the number of jobs created during operational period, and the salary of employees will be above the local average.
Way of monitoring	How	HR records or report
	When	Recorded monthly and aggregated for each monitoring period
	By who	Monitored by the project owner.
Result		Parameter 1: creating 57 long term work positions for local people during operational period Parameter 2: The average salary of employees is 38,276CNY/y, above the local average salary level, 31,313CNY/y, according to the Sichuan Statistical data 2016, which is the most recent available data source. The payroll was provided for verification.
conclusion		With the operation of the Project, 57 long term work positions are created for local people with higher salary level, which effectively improve the family income status of those employees.

No		5
Indicator		Other pollutants
Mitigation measure		(1) The construction period: The solid waste from the project during the construction period will be used as construction materials, and the remaining useless will be periodically cleaned by the sanitation department. (2)The operation period: Dust collected by the Project will be regularly transported out by trucks for comprehensive utilization. The household garbage will be regularly cleared out by sanitary department.
Repeat for each parameter		
Chosen parameter		Solid waste treatment
Current situation of parameter		39,910.97tdust collected by the Project regularly transported for comprehensive utilization
Estimation of baseline situation of parameter		In the absence of the Project, the dust would be emitted into the air.
Future target for parameter		Dust collected by the Project will be regularly transported for comprehensive utilization
Way of monitoring	How	Interviewing with on-site staff about the solid waste treatment during the construction period in first verification. Measure the quantity of the dust collected and transported for comprehensive utilization by the project.
	When	Interviewing with on-site staff about the solid waste treatment in the construction period in first verification. The quantity of the dust collected and transported for comprehensive utilization by the project will be continuously measured and aggregated for each monitoring period
	By who	Monitored by the project owner
Result		(1) solid waste was effectively reused and periodically cleaned by the sanitation department, no any impact on local environment and community, on-site staff and local residents give higher positive comment on solid waste treatment. (2)The quantity of the dust collected by the dust remove system of the Project is 39,910.97tduring the monitoring period, those dust was transported to for comprehensive utilization.

conclusion	The solid waste in construction was effectively reused and periodically cleaned by the sanitation department, no any impact on local environment and community. The dust collected was sent for comprehensive utilization to avoid potential secondary pollution.

During the monitoring period, there is no comment received in the Continuous Input/Grievance Expression Process Book in the reception room of Neijiang Bowei Xinyu Chemical Industry Co., Ltd.. In the Book, contact method is informed to local stakeholders for comments. And there is no comment received yet.

D.3. Implementation of sampling plan

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Not applicable.

SECTION E. Calculation of emission reductions or GHG removals by sinks

E.1. Calculation of baseline emissions or baseline net GHG removals by sinks

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In accordance with the methodology ACM0012 (04.0.0), the baseline emissions are calculated with formulas below.

$$BE_y = BE_{En,y} + BE_{flst,y} \quad (1)$$

Where:

BE_y The total baseline emissions during the year y in tCO₂

$BE_{En,y}$ The baseline emissions from energy generated by the project activity during the year y in tCO₂

$BE_{flst,y}$ 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 per year). As the project only involves the utilization of waste heat, hence, $BE_{flst,y} = 0$.

Therefore, $BE_y = BE_{En,y}$. (2)

As methodology ACM0012 (version 04.0.0) "Scenario-1" has been selected as the project's baseline scenario, $BE_{En,y}$ can be calculated by the following formula:

$$BE_{En,y} = BE_{Elec,y} + BE_{Ther,y} \quad (3)$$

Where:

$BE_{Elec,y}$ Baseline emissions from electricity power during the year y (in tCO₂).

$BE_{Ther,y}$ Baseline emissions from thermal energy (due to heat generation by elemental process) during the year y (in tCO₂).

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

Baseline emissions

$$BE_{Elec,y} = f_{cap} \times f_{wcm} \times \sum_j \sum_i (EG_{i,j,y} \times EF_{Elec,i,j,y}) \quad (4)$$

Where:

$BE_{Elec,y}$ Baseline emissions due to displacement of electricity during the year y (tCO₂)

$EG_{i,j,y}$ 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 in 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 (tCO₂/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.

Since the electricity supply of identified baseline scenario come from CCPG, and the project only involves the utilization of waste heat, hence, formula (4) changes to:

$$BE_{Elec,y} = f_{cap} \times f_{wcm} \times EG_{PJ,y} \times EF_{grid,CM,y} \quad (5)$$

Where:

$EG_{PJ,y}$ Quantity of net electricity generation supplied by the project for captive use in year y (MWh);

$EF_{grid,CM,y}$ Combined Margin CO₂ emission factor of CCPG in year y (tCO₂/MWh);

$EF_{grid,CM,y}$ was calculated ex-ante and will not be changed during the monitoring period. As per the registered PDD of the Project, the value is 0.7338tCO₂/MWh.

The calculation for BE_y was listed in Table 2 as following:

Table 2 . BE_y Calculation

Period	$EG_{PJ,y}$ measured by M2 (MWh)	$EF_{grid,CM,y}$ (tCO ₂ /MWh)	BE_y (tCO ₂)
	(1)	(2)	(3)=(1)*(2)
10/03/2014-13/03/2014	1455.00	0.7338	1067.68
14/03/2014-20/03/2014	2250.05	0.7338	1651.09
21/03/2014-27/03/2014	2351.00	0.7338	1725.16
28/03/2014-03/04/2014	2299.40	0.7338	1687.3
04/04/2014-10/04/2014	2274.90	0.7338	1669.32
11/04/2014-17/04/2014	2405.10	0.7338	1764.86
18/04/2014-24/04/2014	2327.30	0.7338	1707.77
25/04/2014-01/05/2014	2248.85	0.7338	1650.21
02/05/2014-08/05/2014	2335.20	0.7338	1713.57
09/05/2014-15/05/2014	2326.15	0.7338	1706.93
16/05/2014-22/05/2014	2003.15	0.7338	1469.91
23/05/2014-29/05/2014	1951.05	0.7338	1431.68
30/05/2014-05/06/2014	2196.55	0.7338	1611.83
06/06/2014-12/06/2014	2377.00	0.7338	1744.24
13/06/2014-19/06/2014	2190.80	0.7338	1607.61
20/06/2014-26/06/2014	2292.15	0.7338	1681.98
27/06/2014-03/07/2014	2130.55	0.7338	1563.4
04/07/2014-10/07/2014	873.65	0.7338	641.08
11/07/2014-17/07/2014	1002.75	0.7338	735.82
18/07/2014-24/07/2014	1080.35	0.7338	792.76
25/07/2014-31/07/2014	1234.70	0.7338	906.02
01/08/2014-07/08/2014	1779.80	0.7338	1306.02
08/08/2014-14/08/2014	2972.00	0.7338	2180.85
15/08/2014-21/08/2014	2677.85	0.7338	1965.01
22/08/2014-28/08/2014	2561.95	0.7338	1879.96
29/08/2014-04/09/2014	2884.50	0.7338	2116.65
05/09/2014-11/09/2014	1880.35	0.7338	1379.8
12/09/2014-18/09/2014	3325.50	0.7338	2440.25
19/09/2014-25/09/2014	2481.40	0.7338	1820.85
26/09/2014-02/10/2014	2420.40	0.7338	1776.09
03/10/2014-09/10/2014	2460.40	0.7338	1805.44
10/10/2014-16/10/2014	2300.40	0.7338	1688.03
17/10/2014-23/10/2014	2323.35	0.7338	1704.87
24/10/2014-30/10/2014	2246.40	0.7338	1648.41
31/10/2014-06/11/2014	2325.00	0.7338	1706.09
07/11/2014-13/11/2014	3644.30	0.7338	2674.19
14/11/2014-20/11/2014	3861.20	0.7338	2833.35
21/11/2014-27/11/2014	4032.90	0.7338	2959.34
28/11/2014-04/12/2014	3831.75	0.7338	2811.74
05/12/2014-11/12/2014	1785.20	0.7338	1309.98
12/12/2014-18/12/2014	3134.90	0.7338	2300.39
19/12/2014-25/12/2014	4040.05	0.7338	2964.59
26/12/2014-31/12/2014	2761.70	0.7338	2026.54
Total from 10/03/2014-	103336.95		75828.66

31/12/2014			
01/01/2015-08/01/2015	4094.75	0.7338	3004.73
09/01/2015-15/01/2015	3816.15	0.7338	2800.29
16/01/2015-22/01/2015	3843.60	0.7338	2820.43
23/01/2015-29/01/2015	2668.20	0.7338	1957.93
30/01/2015-05/02/2015	2186.30	0.7338	1604.31
06/02/2015-12/02/2015	1812.10	0.7338	1329.72
13/02/2015-19/02/2015	1751.65	0.7338	1285.36
20/02/2015-26/02/2015	1761.25	0.7338	1292.41
27/02/2015-05/03/2015	1683.80	0.7338	1235.57
06/03/2015-12/03/2015	1756.40	0.7338	1288.85
13/03/2015-19/03/2015	1940.25	0.7338	1423.76
20/03/2015-26/03/2015	1885.45	0.7338	1383.54
27/03/2015-02/04/2015	2394.10	0.7338	1756.79
03/04/2015-09/04/2015	2992.15	0.7338	2195.64
10/04/2015-16/04/2015	3135.35	0.7338	2300.72
17/04/2015-23/04/2015	3655.70	0.7338	2682.55
24/04/2015-30/04/2015	2041.50	0.7338	1498.05
31/04/2015-07/05/2015	3877.30	0.7338	2845.16
08/05/2015-14/05/2015	4045.25	0.7338	2968.4
15/05/2015-21/05/2015	4016.05	0.7338	2946.98
22/05/2015-28/05/2015	4022.20	0.7338	2951.49
29/05/2015-04/06/2015	3898.40	0.7338	2860.65
05/06/2015-11/06/2015	3952.90	0.7338	2900.64
12/06/2015-18/06/2015	3635.15	0.7338	2667.47
19/06/2015-25/06/2015	3842.15	0.7338	2819.37
26/06/2015-02/07/2015	3263.40	0.7338	2394.68
03/07/2015-09/07/2015	3571.25	0.7338	2620.58
10/07/2015-16/07/2015	3533.40	0.7338	2592.81
17/07/2015-23/07/2015	3978.20	0.7338	2919.2
24/07/2015-30/07/2015	3997.15	0.7338	2933.11
31/07/2015-06/08/2015	3946.25	0.7338	2895.76
07/08/2015-13/08/2015	3769.75	0.7338	2766.24
14/08/2015-20/08/2015	3968.60	0.7338	2912.16
21/08/2015-27/08/2015	3708.90	0.7338	2721.59
28/08/2015-03/09/2015	3809.85	0.7338	2795.67
04/09/2015-10/09/2015	3834.15	0.7338	2813.5
11/09/2015-17/09/2015	3688.60	0.7338	2706.69
18/09/2015-24/09/2015	3697.50	0.7338	2713.23
25/09/2015-01/10/2015	2963.90	0.7338	2174.91
02/10/2015-08/10/2015	4344.25	0.7338	3187.81
09/10/2015-15/10/2015	3645.75	0.7338	2675.25
16/10/2015-22/10/2015	3629.25	0.7338	2663.14
23/10/2015-29/10/2015	3418.75	0.7338	2508.68
30/10/2015-05/11/2015	3511.30	0.7338	2576.59
06/11/2015-12/11/2015	3743.70	0.7338	2747.13
13/11/2015-19/11/2015	3225.10	0.7338	2366.58
20/11/2015-26/11/2015	3552.30	0.7338	2606.68
27/11/2015-03/12/2015	3843.55	0.7338	2820.4
04/12/2015-10/12/2015	4123.55	0.7338	3025.86
11/12/2015-17/12/2015	3943.40	0.7338	2893.67
18/12/2015-24/12/2015	3583.60	0.7338	2629.65
25/12/2015-31/12/2015	4130.25	0.7338	3030.78
Total in 2015	175133.75		128513.16
01/01/2016-07/01/2016	4140.60	0.7338	3038.37
08/01/2016-14/01/2016	3855.40	0.7338	2829.09
15/01/2016-21/01/2016	3908.50	0.7338	2868.06
22/01/2016-28/01/2016	1301.55	0.7338	955.08
29/01/2016-04/02/2016	4422.95	0.7338	3245.56
05/02/2016-11/02/2016	2846.10	0.7338	2088.47

12/02/2016-18/02/2016	874.85	0.7338	641.96
19/02/2016-25/02/2016*	0.00	0.7338	0
26/02/2016-03/03/2016*	0.00	0.7338	0
04/03/2016-10/03/2016	2123.60	0.7338	1558.3
11/03/2016-17/03/2016	3907.85	0.7338	2867.58
18/03/2016-24/03/2016	4576.95	0.7338	3358.57
25/03/2016-31/03/2016	4056.65	0.7338	2976.77
01/04/2016-07/04/2016	3490.05	0.7338	2561
08/04/2016-14/04/2016	3556.40	0.7338	2609.69
15/04/2016-21/04/2016	4178.10	0.7338	3065.89
22/04/2016-28/04/2016	3275.65	0.7338	2403.67
29/04/2016-05/05/2016	4170.30	0.7338	3060.17
06/05/2016-12/05/2016	4115.35	0.7338	3019.84
13/05/2016-19/05/2016	4089.25	0.7338	3000.69
20/05/2016-26/05/2016	4155.95	0.7338	3049.64
27/05/2016-31/05/2016	3102.85	0.7338	2276.87
Total from 01/01/2016-31/05/2016	70148.90		51475.27
Sum	348619.60		255817.09

* During the period of 02/19/2016 – 03/03/2016, the equipment of the project was in regular maintaining, so there is no electricity.

From 10/03/2014 to 31/05/2016, the monitoring period covers 814 days:

$$Q_{OE,y} = 364,741.5 \text{ MWh}$$

$$Q_{OE,BL} = 254,368.7999 \text{ MWh} \times 814 \div 365 = 567,277.2688 \text{ MWh}$$

So $Q_{OE,y}$ is smaller than the $Q_{OE,BL}$, and the f_{cap} was 1 according to ACM0012.

E.2. Calculation of project emissions or actual net GHG removals by sinks

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Project Emissions include emissions due to (1) combustion of auxiliary fuel to supplement waste gas/heat and (2) electricity emissions due to consumption of electricity for cleaning of gas before being used for generation of energy or other supplementary electricity consumption.

$$PE_y = PE_{AF,y} + PE_{EL,y} \quad (6)$$

Where:

PE_y Project emissions due to the project activity (tCO₂)

$PE_{AF,y}$ Project activity emissions from on-site consumption of fossil fuels by the unit process(es) and/or co-generation 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 (tCO₂). For the project, $PE_{AF,y} = 0$

$PE_{EL,y}$ Project activity emissions from on-site consumption of electricity for gas cleaning equipment or other supplementary electricity consumption (tCO₂).

$$PE_y = PE_{EL,y} \quad (7)$$

According to Tool to calculate baseline, project and/or leakage emissions from power consumption Version 01, the project emission from power consumption is the following:

$$PE_{EL,y} = \sum_j EC_{PJ,j,y} \times EF_{EL,j,y} \times (1 + TDL_{j,y}) \quad (8)$$

$PE_{EL,y}$ is the project emissions from consumption of power in gas cleaning equipment of project activity or other supplementary project power consumption (t CO₂/yr)

$EC_{PJ,j,y}$ is the 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 (tCO₂/MWh), in this case it is grid emission factor of Central China Grid.

$TDL_{j,y}$ 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. so, 9.37% from 2015 Statistics data (<http://www.cec.org.cn/yaowenkuaidi/2016-11-04/160608.html>) has been adopted.

The calculation for PE_y was listed as following:

Table 3. PE_y Calculation

Period	$EC_{PJj,y}$ measured by M3 (MWh)	$TDL_{j,y}$	PE_y
	(4)	(6)	(5)=(4)*(1+(6))*(2)
10/03/2014-13/03/2014	91.1	9.37%	73.11
14/03/2014-20/03/2014	142.1	9.37%	114.04
21/03/2014-27/03/2014	149.8	9.37%	120.22
28/03/2014-03/04/2014	136.6	9.37%	109.63
04/04/2014-10/04/2014	142.2	9.37%	114.12
11/04/2014-17/04/2014	135.5	9.37%	108.75
18/04/2014-24/04/2014	141.1	9.37%	113.24
25/04/2014-01/05/2014	140	9.37%	112.36
02/05/2014-08/05/2014	147.9	9.37%	118.7
09/05/2014-15/05/2014	147.9	9.37%	118.7
16/05/2014-22/05/2014	160.5	9.37%	128.81
23/05/2014-29/05/2014	222.3	9.37%	178.41
30/05/2014-05/06/2014	229.2	9.37%	183.95
06/06/2014-12/06/2014	164.3	9.37%	131.86
13/06/2014-19/06/2014	148.2	9.37%	118.94
20/06/2014-26/06/2014	179.6	9.37%	144.14
27/06/2014-03/07/2014	165.9	9.37%	133.14
04/07/2014-10/07/2014	90.4	9.37%	72.55
11/07/2014-17/07/2014	61.6	9.37%	49.44
18/07/2014-24/07/2014	137.8	9.37%	110.59
25/07/2014-31/07/2014	122	9.37%	97.91
01/08/2014-07/08/2014	114.5	9.37%	91.89
08/08/2014-14/08/2014	266.7	9.37%	214.04
15/08/2014-21/08/2014	221.6	9.37%	177.85
22/08/2014-28/08/2014	313.4	9.37%	251.52
29/08/2014-04/09/2014	343.7	9.37%	275.84
05/09/2014-11/09/2014	260	9.37%	208.66
12/09/2014-18/09/2014	386	9.37%	309.79
19/09/2014-25/09/2014	215.7	9.37%	173.11
26/09/2014-02/10/2014	215.7	9.37%	173.11
03/10/2014-09/10/2014	215.9	9.37%	173.27
10/10/2014-16/10/2014	193.6	9.37%	155.38
17/10/2014-23/10/2014	204.3	9.37%	163.96
24/10/2014-30/10/2014	181.2	9.37%	145.42
31/10/2014-06/11/2014	216.1	9.37%	173.43
07/11/2014-13/11/2014	302.3	9.37%	242.61
14/11/2014-20/11/2014	351.1	9.37%	281.78
21/11/2014-27/11/2014	424	9.37%	340.28
28/11/2014-04/12/2014	394	9.37%	316.21
05/12/2014-11/12/2014	232.7	9.37%	186.76
12/12/2014-18/12/2014	332.8	9.37%	267.09
19/12/2014-25/12/2014	344.4	9.37%	276.4
26/12/2014-31/12/2014	246.197	9.37%	197.59
Total from 10/03/2014-31/12/2014	9031.897		7248.6
01/01/2015-08/01/2015	278.1	9.37%	223.19
09/01/2015-15/01/2015	259.7	9.37%	208.42

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16/01/2015-22/01/2015	262.3	9.37%	210.51
23/01/2015-29/01/2015	210.7	9.37%	169.1
30/01/2015-05/02/2015	252.5	9.37%	202.65
06/02/2015-12/02/2015	228.2	9.37%	183.14
13/02/2015-19/02/2015	232.85	9.37%	186.88
20/02/2015-26/02/2015	232.85	9.37%	186.88
27/02/2015-05/03/2015	207.1	9.37%	166.21
06/03/2015-12/03/2015	203.1	9.37%	163
13/03/2015-19/03/2015	225	9.37%	180.58
20/03/2015-26/03/2015	236.3	9.37%	189.64
27/03/2015-02/04/2015	304.1	9.37%	244.06
03/04/2015-09/04/2015	302.2	9.37%	242.53
10/04/2015-16/04/2015	327.1	9.37%	262.52
17/04/2015-23/04/2015	408.6	9.37%	327.92
24/04/2015-30/04/2015	269.1	9.37%	215.97
31/04/2015-07/05/2015	389.9	9.37%	312.92
08/05/2015-14/05/2015	389.9	9.37%	312.92
15/05/2015-21/05/2015	351.6	9.37%	282.18
22/05/2015-28/05/2015	360	9.37%	288.92
29/05/2015-04/06/2015	358.3	9.37%	287.56
05/06/2015-11/06/2015	354.9	9.37%	284.83
12/06/2015-18/06/2015	300.4	9.37%	241.09
19/06/2015-25/06/2015	323.9	9.37%	259.95
26/06/2015-02/07/2015	312.1	9.37%	250.48
03/07/2015-09/07/2015	424	9.37%	340.28
10/07/2015-16/07/2015	381.6	9.37%	306.26
17/07/2015-23/07/2015	345.1	9.37%	276.96
24/07/2015-30/07/2015	401.2	9.37%	321.99
31/07/2015-06/08/2015	308.1	9.37%	247.27
07/08/2015-13/08/2015	380.6	9.37%	305.45
14/08/2015-20/08/2015	352.5	9.37%	282.9
21/08/2015-27/08/2015	335.7	9.37%	269.42
28/08/2015-03/09/2015	258.6	9.37%	207.54
04/09/2015-10/09/2015	292.7	9.37%	234.91
11/09/2015-17/09/2015	264.3	9.37%	212.12
18/09/2015-24/09/2015	298.6	9.37%	239.64
25/09/2015-01/10/2015	341.4	9.37%	273.99
02/10/2015-08/10/2015	393.8	9.37%	316.05
09/10/2015-15/10/2015	334.5	9.37%	268.46
16/10/2015-22/10/2015	334.8	9.37%	268.7
23/10/2015-29/10/2015	310	9.37%	248.79
30/10/2015-05/11/2015	294.5	9.37%	236.35
06/11/2015-12/11/2015	347.9	9.37%	279.21
13/11/2015-19/11/2015	348.1	9.37%	279.37
20/11/2015-26/11/2015	260.3	9.37%	208.91
27/11/2015-03/12/2015	360.6	9.37%	289.4
04/12/2015-10/12/2015	403.7	9.37%	323.99
11/12/2015-17/12/2015	280	9.37%	224.72
18/12/2015-24/12/2015	310.4	9.37%	249.11
25/12/2015-31/12/2015	434.6	9.37%	348.79
Total in 2015	16378.4		13144.63
01/01/2016-07/01/2016	317.1	9.37%	254.49
08/01/2016-14/01/2016	402.5	9.37%	323.03
15/01/2016-21/01/2016	314.8	9.37%	252.64
22/01/2016-28/01/2016	183.9	9.37%	147.59
29/01/2016-04/02/2016	277	9.37%	222.31
05/02/2016-11/02/2016	234.2	9.37%	187.96
12/02/2016-18/02/2016	109.299	9.37%	87.72
19/02/2016-25/02/2016	51.601	9.37%	41.41
26/02/2016-03/03/2016	59.603	9.37%	47.83

04/03/2016-10/03/2016	250.797	9.37%	201.28
11/03/2016-17/03/2016	394.7	9.37%	316.77
18/03/2016-24/03/2016	458.405	9.37%	367.7
25/03/2016-31/03/2016	389.095	9.37%	312.27
01/04/2016-07/04/2016	357.903	9.37%	287.24
08/04/2016-14/04/2016	391.697	9.37%	314.36
15/04/2016-21/04/2016	354.7	9.37%	284.67
22/04/2016-28/04/2016	385.696	9.37%	309.54
29/04/2016-05/05/2016	399.104	9.37%	320.3
06/05/2016-12/05/2016	345.496	9.37%	277.28
13/05/2016-19/05/2016	356.704	9.37%	286.28
20/05/2016-26/05/2016	367.397	9.37%	294.86
27/05/2016-31/05/2016	331.403	9.37%	265.97
Total from 01/01/2016-31/05/2016	6733.1		5403.7
Sum	32143.397		25796.93

E.3. Calculation of leakage

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As per the methodology ACM0012 (version 04.0.0), no leakage needs to be considered in the project,

$$LE_y = 0 \text{ tCO}_2\text{e.}$$

E.4. Summary of calculation of emission reductions or net GHG removals by sinks

Item	Baseline emission or baseline net GHG removals by sinks (t CO ₂ e)	Project emission s or actual net GHG removals by sinks (t CO ₂ e)	Leakage (t CO ₂ e)	GHG emission reductions or net GHG removals by sinks (t CO ₂ e) achieved in the monitoring period		
				Up to 31/12/2012	From 01/01/2013	Total amount
10/03/2014 - 31/12/2014	75,828.66	7,248.60	0	0	68,580	68,580
01/01/2015 - 31/12/2015	128,513.16	13,144.63	0	0	115,368	115,368
01/01/2016 – 31/05/2016	51,475.27	5,403.70	0	0	46,071	46,071
Total	255,817.09	25,796.93	0	0	230,019	230,019

The emission reduction (ER_y) during a given year y is calculated according to the formula $ER_y = BE_y - PE_y$

The calculation for ER_y was listed as following:

Period	BE_y (tCO ₂)	PE_y (tCO ₂)	ER_y (tCO ₂)
	(3)	(5)	(7)=(3)-(5)
10/03/2014-13/03/2014	1067.68	73.11	994.57
14/03/2014-20/03/2014	1651.09	114.04	1537.05
21/03/2014-27/03/2014	1725.16	120.22	1604.94
28/03/2014-03/04/2014	1687.30	109.63	1577.67
04/04/2014-10/04/2014	1669.32	114.12	1555.20
11/04/2014-17/04/2014	1764.86	108.75	1656.11
18/04/2014-24/04/2014	1707.77	113.24	1594.53
25/04/2014-01/05/2014	1650.21	112.36	1537.85
02/05/2014-08/05/2014	1713.57	118.70	1594.87
09/05/2014-15/05/2014	1706.93	118.70	1588.23
16/05/2014-22/05/2014	1469.91	128.81	1341.10
23/05/2014-29/05/2014	1431.68	178.41	1253.27
30/05/2014-05/06/2014	1611.83	183.95	1427.88
06/06/2014-12/06/2014	1744.24	131.86	1612.38
13/06/2014-19/06/2014	1607.61	118.94	1488.67
20/06/2014-26/06/2014	1681.98	144.14	1537.84
27/06/2014-03/07/2014	1563.40	133.14	1430.26
04/07/2014-10/07/2014	641.08	72.55	568.53
11/07/2014-17/07/2014	735.82	49.44	686.38
18/07/2014-24/07/2014	792.76	110.59	682.17
25/07/2014-31/07/2014	906.02	97.91	808.11

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01/08/2014-07/08/2014	1306.02	91.89	1214.13
08/08/2014-14/08/2014	2180.85	214.04	1966.81
15/08/2014-21/08/2014	1965.01	177.85	1787.16
22/08/2014-28/08/2014	1879.96	251.52	1628.44
29/08/2014-04/09/2014	2116.65	275.84	1840.81
05/09/2014-11/09/2014	1379.80	208.66	1171.14
12/09/2014-18/09/2014	2440.25	309.79	2130.46
19/09/2014-25/09/2014	1820.85	173.11	1647.74
26/09/2014-02/10/2014	1776.09	173.11	1602.98
03/10/2014-09/10/2014	1805.44	173.27	1632.17
10/10/2014-16/10/2014	1688.03	155.38	1532.65
17/10/2014-23/10/2014	1704.87	163.96	1540.91
24/10/2014-30/10/2014	1648.41	145.42	1502.99
31/10/2014-06/11/2014	1706.09	173.43	1532.66
07/11/2014-13/11/2014	2674.19	242.61	2431.58
14/11/2014-20/11/2014	2833.35	281.78	2551.57
21/11/2014-27/11/2014	2959.34	340.28	2619.06
28/11/2014-04/12/2014	2811.74	316.21	2495.53
05/12/2014-11/12/2014	1309.98	186.76	1123.22
12/12/2014-18/12/2014	2300.39	267.09	2033.30
19/12/2014-25/12/2014	2964.59	276.4	2688.19
26/12/2014-31/12/2014	2026.54	197.59	1828.95
Total from 10/03/2014-31/12/2014	75828.66	7248.60	68580
01/01/2015-08/01/2015	3004.73	223.19	2781.54
09/01/2015-15/01/2015	2800.29	208.42	2591.87
16/01/2015-22/01/2015	2820.43	210.51	2609.92
23/01/2015-29/01/2015	1957.93	169.10	1788.83
30/01/2015-05/02/2015	1604.31	202.65	1401.66
06/02/2015-12/02/2015	1329.72	183.14	1146.58
13/02/2015-19/02/2015	1285.36	186.88	1098.48
20/02/2015-26/02/2015	1292.41	186.88	1105.53
27/02/2015-05/03/2015	1235.57	166.21	1069.36
06/03/2015-12/03/2015	1288.85	163	1125.85
13/03/2015-19/03/2015	1423.76	180.58	1243.18
20/03/2015-26/03/2015	1383.54	189.64	1193.90
27/03/2015-02/04/2015	1756.79	244.06	1512.73
03/04/2015-09/04/2015	2195.64	242.53	1953.11
10/04/2015-16/04/2015	2300.72	262.52	2038.20
17/04/2015-23/04/2015	2682.55	327.92	2354.63
24/04/2015-30/04/2015	1498.05	215.97	1282.08
31/04/2015-07/05/2015	2845.16	312.92	2532.24
08/05/2015-14/05/2015	2968.4	312.92	2655.48
15/05/2015-21/05/2015	2946.98	282.18	2664.80
22/05/2015-28/05/2015	2951.49	288.92	2662.57
29/05/2015-04/06/2015	2860.65	287.56	2573.09
05/06/2015-11/06/2015	2900.64	284.83	2615.81
12/06/2015-18/06/2015	2667.47	241.09	2426.38
19/06/2015-25/06/2015	2819.37	259.95	2559.42
26/06/2015-02/07/2015	2394.68	250.48	2144.20
03/07/2015-09/07/2015	2620.58	340.28	2280.30
10/07/2015-16/07/2015	2592.81	306.26	2286.55
17/07/2015-23/07/2015	2919.2	276.96	2642.24
24/07/2015-30/07/2015	2933.11	321.99	2611.12
31/07/2015-06/08/2015	2895.76	247.27	2648.49
07/08/2015-13/08/2015	2766.24	305.45	2460.79
14/08/2015-20/08/2015	2912.16	282.9	2629.26
21/08/2015-27/08/2015	2721.59	269.42	2452.17
28/08/2015-03/09/2015	2795.67	207.54	2588.13
04/09/2015-10/09/2015	2813.5	234.91	2578.59

11/09/2015-17/09/2015	2706.69	212.12	2494.57
18/09/2015-24/09/2015	2713.23	239.64	2473.59
25/09/2015-01/10/2015	2174.91	273.99	1900.92
02/10/2015-08/10/2015	3187.81	316.05	2871.76
09/10/2015-15/10/2015	2675.25	268.46	2406.79
16/10/2015-22/10/2015	2663.14	268.7	2394.44
23/10/2015-29/10/2015	2508.68	248.79	2259.89
30/10/2015-05/11/2015	2576.59	236.35	2340.24
06/11/2015-12/11/2015	2747.13	279.21	2467.92
13/11/2015-19/11/2015	2366.58	279.37	2087.21
20/11/2015-26/11/2015	2606.68	208.91	2397.77
27/11/2015-03/12/2015	2820.4	289.4	2531.00
04/12/2015-10/12/2015	3025.86	323.99	2701.87
11/12/2015-17/12/2015	2893.67	224.72	2668.95
18/12/2015-24/12/2015	2629.65	249.11	2380.54
25/12/2015-31/12/2015	3030.78	348.79	2681.99
Total in 2015	128513.16	13144.63	115368
01/01/2016-07/01/2016	3038.37	254.49	2783.88
08/01/2016-14/01/2016	2829.09	323.03	2506.06
15/01/2016-21/01/2016	2868.06	252.64	2615.42
22/01/2016-28/01/2016	955.08	147.59	807.49
29/01/2016-04/02/2016	3245.56	222.31	3023.25
05/02/2016-11/02/2016	2088.47	187.96	1900.51
12/02/2016-18/02/2016	641.96	87.72	554.24
19/02/2016-25/02/2016	0	41.41	-41.41
26/02/2016-03/03/2016	0	47.83	-47.83
04/03/2016-10/03/2016	1558.3	201.28	1357.02
11/03/2016-17/03/2016	2867.58	316.77	2550.81
18/03/2016-24/03/2016	3358.57	367.7	2990.67
25/03/2016-31/03/2016	2976.77	312.27	2664.50
01/04/2016-07/04/2016	2561	287.24	2273.76
08/04/2016-14/04/2016	2609.69	314.36	2295.33
15/04/2016-21/04/2016	3065.89	284.67	2781.22
22/04/2016-28/04/2016	2403.67	309.54	2094.13
29/04/2016-05/05/2016	3060.17	320.3	2739.87
06/05/2016-12/05/2016	3019.84	277.28	2742.56
13/05/2016-19/05/2016	3000.69	286.28	2714.41
20/05/2016-26/05/2016	3049.64	294.86	2754.78
27/05/2016-31/05/2016	2276.87	265.97	2010.90
Total from 01/01/2016-31/05/2016	51475.27	5403.7	46071
Sum	255817.09	25796.93	230,019

* During the period of 02/19/2016 – 03/03/2016, the equipment of the project was in regular maintaining, so there is no electricity.

E.5. Comparison of actual emission reductions or net GHG removals by sinks with estimates in registered PDD

Item	Values estimated in ex ante calculation of registered PDD	Actual values achieved during this monitoring period
Emission reductions or GHG removals by sinks (t CO ₂ e)	342,165*	230,019

*The estimated annual emission reductions are 153,428tCO₂e as per registered PDD. The monitoring period covers 814 days, $153,428\text{tCO}_2\text{e} \times 814\text{days} / 365\text{days} = 342,165\text{tCO}_2\text{e}$.

E.6. Remarks on difference from estimated value in registered PDD

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The actual emission reductions generated in the monitoring period are 230,019 tCO₂e, which are 32.77% less than the estimated emission reductions in the registered PDD.

Appendix 1. Contact information of project participants and responsible persons/entities

Project participant and/or responsible person/ entity	☒ Project participant ☐ Responsible person/ entity for completing the CDM-MR-FORM
Organization name	Neijiang Bowei Xinyu Chemical Industry Co.,Ltd.
Street/P.O. Box	Jiefang Street, LianjieTown, WeiyuanCounty,
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Contact person	Zhao Bin
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Direct tel.	+86-(0)10-58689628
Personal e-mail	hollywang816@126.com

Project participant and/or responsible person/ entity	☒ Project participant ☐ Responsible person/ entity for completing the CDM-MR-FORM
Organization name	Carbon Invcap International Trading Co., Ltd.
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City	London
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Postcode	EC1V2NX
Country	United Kingdom of Great Britain and Northern Ireland
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Website	
Contact person	Jessy Tang
Title	

Salutation	
Last name	Jessy
Middle name	
First name	Tang
Department	
Mobile	
Direct fax	+86 10 62682682
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Personal e-mail	gs@carboninvcap.com

Project participant and/or responsible person/ entity	☐ Project participant ☒ Responsible person/ entity for completing the CDM-MR-FORM
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Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
05.1	4 May 2015	Editorial revision to correct version numbering.
05.0	1 April 2015	Revisions to: • Include provisions related to delayed submission of a monitoring plan; • Provisions related to the Host Party; • Remove reference to programme of activities; • Overall editorial improvement.
04.0	25 June 2014	Revisions to: • Include the Attachment: Instructions for filling out the monitoring report form (these instructions supersede the "Guideline: Completing the monitoring report form" (Version 04.0)); • Include provisions related to standardized baselines; • Add contact information on a responsible person(s)/ entity(ies) for completing the CDM-MR-FORM in A.6 and Appendix 1; • Change the reference number from <i>F-CDM-MR</i> to <i>CDM-MR-FORM</i>; • Editorial improvement.
03.2	5 November 2013	Editorial revision to correct table in page 1.
03.1	2 January 2013	Editorial revision to correct table in section E.5.
03.0	3 December 2012	Revision required to introduce a provision on reporting actual emission reductions or net GHG removals by sinks for the period up to 31 December 2012 and the period from 1 January 2013 onwards (EB70, Annex 11).
02.0	13 March 2012	Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20).
01	28 May 2010	EB 54, Annex 34. Initial adoption.
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