



SSC POA VALIDATION REPORT

**UPM UMWELT-PROJEKT-MANAGEMENT
GMBH**

**SICHUAN RURAL POOR-HOUSEHOLD BIOGAS
DEVELOPMENT PROGRAMME**

Report No: 8000389378-10/468-PoA

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Validation Report:	Report No.	Rev. No.	Date of 1st issue:	Date of this rev.
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Client:	UPM Umwelt-Projekt-Management GmbH	Client ref.:	Mr. Martin Dilger.	
Project: PoA-DD	Title:	Initial Version:	Final Version	
	Sichuan Rural Poor-Household Biogas Development Programme	1.0	1.6	
Generic CPA-DD	Sichuan Rural Poor-Household Biogas Development Programme, CPA Nb. SCHHBG-XXXX-XX	1.0	1.4	
Involved Parties	Host party:	Other involved parties:		
	People's Republic of China	United Kingdom		
CME and Project Participants	Involved Entities/ Roles	CME:	Project Participant:	
	Chengdu Oasis Science & Technology Co., Ltd UPM Umwelt-Projekt-Management GmbH	<input checked="" type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	
Applied methodology(ies):	Title:	Version No.	Scope	Approved for PoA
	AMS I.C – Thermal energy for the user with or without electricity	Version 19	1	<input checked="" type="checkbox"/>
	AMS III.R– Methane recovery in agricultural activities at household/small farm level	Version 2	15	<input checked="" type="checkbox"/>
Validation team / Technical Review and Final Approval	Validation Team:	Technical review:		Final approval:
	Jun Wang, Stefan Winter (TL, TE)	Ulrich Walter (TE) Heiner Lenzian Rainer Winter		Rainer Winter
Real Case Details	Expected annual average emission reductions over the first crediting period:	PoA Duration:	Expected PoA starting date:	
	1,493,717 ¹ /XLS/ t CO _{2e}	28 years	2012-03-15	
Summary	<input checked="" type="checkbox"/> Positive validation opinion	<input type="checkbox"/> Negative validation opinion		
Summary of Validation Opinion:	<p>UPM Umwelt-Projekt-Management GmbH has commissioned the TÜV NORD JI/CDM Certification Program (CP) to validate the programme of activities (PoA): "Sichuan Rural Poor-Household Biogas Development Programme" with regard to the relevant requirements of the UNFCCC for CDM project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria include article 12 of the Kyoto Protocol, the modalities and procedures for CDM (Marrakech Accords) and the relevant decisions by COP/MOP and CDM Executive Board.</p> <p>In the course of the validation 27 Corrective Action Requests (CARs) and 8 Clarification Requests (CLs) for PoA-DD and 1 CAR for generic CPA-DD were raised and all have been successfully closed. No FAR has been raised and has no impact on issues related to registration.</p> <p>The review of the PoA design documentations and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and review of comments by parties, stakeholders and NGOs have provided TÜV NORD JI/CDM CP with sufficient evidence to validate the fulfilment of the stated criteria.</p> <p>In detail the conclusions can be summarised as follows:</p> <ul style="list-style-type: none"> - The PoA is in line with all relevant host country criteria (China) and all relevant UNFCCC requirements for CDM. Project activity approval have been obtained from DNA of China vide the Letter of Approval (HCA) dated 2011-12-06 and vide the. Letter of approval from Annex I country UK (LOA) dated 2012-01-19. - The baseline has been appropriately identified as per the applied methodology. - The PoA additionality is sufficiently justified in the PoA-DD. - The eligibility criteria established for CPA inclusion are deemed appropriate and sufficient. - The monitoring plan is transparent and adequate. - The calculation of the emission factors and the CPA emission reductions is carried out in a transparent and conservative manner. - Information on the local stakeholders' consultation by the project participants prior to submitting the PoA for validation is sufficiently provided in the PoA-DD. - All information has been also consistently applied in the generic CPA-DD form. <p>The conclusions of this report show, that the PoA, as it was described in the project documentations, is in line with all criteria applicable for the validation.</p>			
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	2012-04-03_FVR_PoA_UPM_Sichuan_digester_programme_clean.doc	195		

¹ As per reference /XLS/ Annual average CERs in first Crediting Period

Abbreviations

BAU	Business as usual
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CO₂	Carbon dioxide
CO_{2e}	Carbon dioxide equivalent
CP	Certification Program
CPA	CDM Programme Activities
CPA-DD	CDM programme Activity Design Document
GSCP	Global Stakeholder Consultation Process
POA-DDs	(CDM PoA and CPA) Design Documents
DOE	Designated Operational Entities
DNA	Designated National Authority
EB	CDM Executive Board
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
MAT	Mean Annual Temperature
ODA	Official Development Assistance
PoA	Programme of Activities
PoA-DD	CDM Programme of Activities Design Document
HH	Household
QC/QA	Quality control/Quality assurance
SREO	Sichuan Rural Energy Office
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual

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1 OBJECTIVE / SCOPE

The purpose of a PoA validation is to have an independent third party assess the project design. In particular the project's baseline, the monitoring plan (MP), and the project's compliance with

- the requirements set forth in the most recent versions of the CDM Rules, including the requirements of Article 12 of the Kyoto Protocol, the CDM modalities and procedures as agreed in the Marrakech Accords under decision 3/CMP.1 the subsequent decisions by the CMP, and any relevant documents released by the CDM Executive Board (the "EB") and available on the UNFCCC CDM website at <http://unfccc.int> (the aforementioned requirements together the "CDM Requirements");
- Clean Development Mechanism Validation and Verification Manual (current version 01.2; EB55 Annex 1, esp. para 165 – 168) (the "VVM")
- Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities (current version EB 65, Annex 3)
- Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities (current version 04.1, EB 55 Annex 38) (the "PoA Procedures");
- Procedures for review of erroneous inclusion of a CPA (current version 03, EB 61 Annex 22) (the "CPA Review Procedures")
- Guidance for determining the occurrence of de-bundling under a programme of activities (PoA) (current version 03, EB54 Annex 13) (the "De-bundling Guidance")
- Procedures for approval of the application of multiple methodologies to a programme of activities (current version 01; EB 47 Annex 31) (the "Multi-Meth Approval Procedures");
- Standard for Sampling and Surveys for CDM Project Activities and Programme of Activities (current version EB 65, Annex 2), (the "Sampling Guidelines")
- Guidelines on Project Design Documents (PDDs) on <http://cdm.unfccc.int/Reference/Guidclarif/pdd/index.html>
- the host country legislation and sustainability criteria as applicable under the CDM-related laws and regulations of the country in which the PoA and CPAs are physically located;

are validated in order to confirm that the programme design as documented is sound and reasonable and meets the stated requirements and identified criteria. Validation is seen as necessary to provide assurance to stakeholders on the quality of the programme and its intended generation of certified emission reductions (CERs).

The validation scope is given as a thorough independent and objective assessment of the programme design, information that are included in the POA-DDs and other relevant supporting documents, to ensure that the proposed CDM programme activity meets all relevant and applicable CDM and PoA criteria.

As per the PoA procedures, TÜV NORD will validate the following documentation as provided by the client:

- a completed Clean Development Mechanism Programme of Activities Design Document Form (the “**CDM-PoA-DD**”);
- a completed PoA-specific Clean Development Mechanism Program Activity Design Document Form (the “**CDM-CPA-DD**”) with generic information relevant to all CPAs (as the “**PoA-Generic CDM-CPA-DD**”);
- a completed CDM-CPA-DD which is to be based on the application of the PoA to one real case (the “**Real-Case CDM-CPA-DD**”), and
- relevant supporting documents.

TÜV NORD validates the following information provided by the client in the CDM-PoA-DD:

- the correct application of the baseline and monitoring methodology (ies) and tools,
 - In cases where more than one approved methodology will be applied to each CPA, confirmation that the application of multiple methodologies has been approved in accordance with “Procedures for approval of the application of multiple methodologies to a programme of activities”.
- coordinating/managing entity, host party/ies and PoA Participants
- geographical boundaries of the PoA including all national and/or sectoral policies and regulations;
- policy, measure or stated goal of the PoA;
- confirmation about voluntary action by the coordinating/managing entity;
- the programme’s baseline study;
- demonstration of additionality of the PoA;
- description of a typical CPA (including technology or measures, baseline and monitoring methodology justification and application, demonstration of additionality, and accounting for leakage);
- eligibility criteria designed for the inclusion of CPAs in the PoA, including criteria to be used for demonstration of additionality of a CPA;
- starting date and length of the PoA;

- operational and management arrangements established by the coordinating/ managing entity for the implementation of the PoA, including
 - a record keeping system for each CPA under the PoA,
 - a system/procedure to avoid double accounting e.g. to avoid the case of including a new CPA that has been already registered either as CDM project activity or as a CPA of another PoA,
 - the provisions to ensure that those operating the CPA are aware and have agreed that their activity is being subscribed to the PoA;
- monitoring plan for a CPA with record-keeping system;
- indicators/data to be monitored and reported;
- statistically sound sampling method to be used for verification;
- environmental impacts and analysis;
- Stakeholder Consultation Procedure as required under the CDM Rules;
- public funding;
- Letter(s) of Approval as required under the CDM Rules.

TÜV NORD validates the following information provided by the client in the PoA- Generic CDM-CPA-DD:

- unique identification of the CPA by location or if applicable by registration code;
- contact details of persons responsible for each CPA;
- host party;
- starting date and duration of the crediting period;
- eligibility criteria;
- demonstration of additionality;
- baseline greenhouse gas emissions;
- estimated emission reductions;
- environmental impacts and analysis;
- stakeholder consultation procedure;
- confirmation regarding no prior CDM registration or inclusion in another PoA;
- consistency between CDM-POA-DD and the PoA- Generic CDM-CPA-DD.

TÜV NORD validates the Real-Case CDM-CPA-DD with regard to

- consistency with the CDM-PoA-DD;
- consistency with the PoA- Generic CDM-CPA-DD;
- additionality;
- eligibility criteria;
- operational and management arrangements;
- local stakeholder commenting process.

The information included in the POA-DDs and the supporting documents were reviewed against the requirements as set out by the UNFCCC. The validation team



has, based on the requirements in the Validation and Verification Manual^{VVM}, carried out a full assessment of all evidences to assess the compliance of the programme with the key areas as outlined in section V.E. and V.F. of the VVM (version 1.2, EB 55 Annex 1).

The validation is based on the information made available to TÜV NORD JI/CDM CP and on the contract conditions. TÜV NORD JI/CDM CP cannot be held liable by any entity for making its validation opinion based on any false or misleading information supplied to it during the course of validation.

The validation is not meant to provide any consulting to the project participants. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

2 GHG POA DESCRIPTION

2.1 PoA Characteristics

Essential data of the project is presented in the following Table 2-1.

Table 2-1: PoA Characteristics

Item	Data	
PoA title	Sichuan Rural Poor-Household Biogas Development Programme	
Generic CPA title	Sichuan Rural Poor-Household Biogas Development Programme, CPA Nb. SCHHBG-XXXX-XX	
1 st CPA (real case) title	Sichuan Rural Poor-Household Biogas Development Programme, CPA Nb. SCHHBG-2010-01	
PoA size	<input type="checkbox"/> Large Scale <input checked="" type="checkbox"/> Small Scale	
Programme Scope (according to UNFCCC sectoral scope numbers for CDM)	<input checked="" type="checkbox"/> 1 Energy Industries (renewable- /non-renewable sources)	
	<input type="checkbox"/> 2 Energy distribution	
	<input type="checkbox"/> 3 Energy demand	
	<input type="checkbox"/> 4 Manufacturing industries	
	<input type="checkbox"/> 5 Chemical industry	
	<input type="checkbox"/> 6 Construction	
	<input type="checkbox"/> 7 Transport	
	<input type="checkbox"/> 8 Mining/Mineral production	
	<input type="checkbox"/> 9 Metal production	
	<input type="checkbox"/> 10 Fugitive emissions from fuels (solid, oil and gas)	
	<input type="checkbox"/> 11 Fugitive emissions from production and consumption of halocarbons and hexafluoride	
	<input type="checkbox"/> 12 Solvents use	
	<input type="checkbox"/> 13 Waste handling and disposal	
	<input type="checkbox"/> 14 Afforestation and Reforestation	
	<input checked="" type="checkbox"/> 15 Agriculture	
Applied Methodology(ies) Title and Version No.	AMS I.C – Thermal energy for the user with or without electricity (Version 19); AMS III.R– Methane recovery in agricultural activities at household/small farm level (Version 2)	
PoA Duration	28 years	
Starting date of the PoA	2012-05-10 (or on the date of registration, whichever is later)	
CPA Crediting period	<input type="checkbox"/> Renewable Crediting Period (7 y) <input checked="" type="checkbox"/> Fixed Crediting Period (10 y)	
Start of crediting period of the 1 st (real case) CPA ²	2012-05-10 (or on the date of registration, whichever is later)	
Estimated metric tCO ₂ equivalent reductions of the 1 st CPA over the first crediting period	Annual average	2,278 tCO ₂ e
	Total estimation over the 1 st crediting period	22,780 tCO ₂ e

² As per the published POA-DD (version 1)

2.2 Involved Parties, Coordinating / managing entity(ies), program participants of the POA and operators of individual CPAs

The following parties to the Kyoto Protocol and project participants are involved in this PoA (Table 2-2-1).

Table 2-2-1: Parties and Project Participants of the PoA

Name of Party Involved ((host) indicates a host party)	Private and/or Public Entity(ies) Project Participants ((CME) indicates the Coordinating and Managing Entity)	Does Party Involved Wish to be Considered as Project Participant (Yes/No)
People's Republic of China (host)	Chengdu Oasis Science & Technology Co., Ltd (CME)	No
United Kingdom	UPM Umwelt-Projekt-Management GmbH	No

The CPA operator(s) of the 1st real case CPA is(are) listed in Table 2-2-2.

Table 2-2-2: Operator(s) of individual CPAs

CPA No.	CPA title	Operator	CPA Location	Geographical Coordinates
SCHHBG-2010-001	Sichuan Rural Poor-Household Biogas Development Programme, CPA Nb. SCHHBG-2010-001	Chengdu Oasis Science & Technology Co. Ltd.	City of Yibin, Sichuan Province, China.	27°50'N – 29°16'N, and 103°36'E – 105°20'E.

2.3 Programme Boundary and Location

The details of the programme location are given in table 2-3:

Table 2-3-1: Programme Location

No.	Programme Location
Host Country	People's Republic of China
Region(s):	Administrative boundary of Sichuan province
1 st (real case) CPA Project location address:	City of Yibin, Sichuan Province, China.

2.4 Technical Programme Description

The measure to be employed under this PoA is the installation of small biogas digesters according to national standard NY/T 465-2001. The typical digester under this PoA consists of an inlet, inlet pipe, fermentation chamber, gas storage chamber,

hydraulic chamber, movable cover and a gas type. The inlet is directly connected with the barn of the animals (pigs).

The produced biogas is utilized by farmers for cooking. Therefore each household will be equipped with a connection pipe and a biogas cook stove. For utilization of the biogas in the stove each utilization system contains a desulphurization and dehydration unit to extract harmful substances.

The technical key data are provided in table 2-4 below

Table 2-4: Technical data of the project activity

Type/Model	Parameter	Unit	Value
Digester	Capacity of fermentation chamber	m ³	6, 8 or 10
	Capacity	kW	0.27 (on 24h basis) 2.72 (on 2h basis)
	Number of Units	-	About 1 Mio.
Stove	Capacity	kW	2.955 ³
			About 1 Mio.

³ As per biogas stove test report/TEST/

3 METHODOLOGY AND VALIDATION SEQUENCE

3.1 Validation Steps

The validation of the PoA consists of the following steps:

- Contract review
- Appointment of team members and technical reviewers
- Publication of the following project documents POA-DDs
 - the **CDM-PoA-DD**
 - the **PoA-Generic CDM-CPA-DD**
 - the **Real-Case CDM-CPA-DD**
- A desk review of all abovementioned POA-DDs^{/PDDs/} submitted by the client and additional supporting documents with the use of customised validation protocol^{/CPM/} according to the Validation and Verification Manual^{/VVM/}, and all PoA related regulations^{/POAR/}
- Validation planning,
- On-Site assessment,
- Background investigation and follow-up interviews with personnel of the project developer and its contractors,
- Draft validation reporting
- Resolution of corrective actions (if any)
- Final validation reporting
- Technical review
- Final approval of the validation.

The sequence of the validation is given in the table 3-1 below:

Table 3-1: Validation sequence

Topic	Time
Assignment of validation	2010-10-18
Submission of POA-DDs for global stakeholder commenting process	2010-10-28
On-site visit	2011-01-17 to 2011-01-21
Draft reporting finalised	2011-03-17
Final reporting finalised	2012-02-14
Technical review on final reporting finalised	2012-02-14
FVR updated due to incomplete	2012-04-05

3.2 Contract review

To assure that

- the PoA falls within the scopes for which accreditation is held,
- the necessary competences to carry out the validation can be provided,
- Impartiality issues are clear and in line with the CDM accreditation requirements,

a contract review was carried out before the contract was signed.

3.3 Appointment of team members and technical reviewers

On the basis of a competence analysis and individual availabilities a verification team, consistent of one team leader and 1 additional team member, were appointed. Furthermore also the personnel for the technical review and the final approval were determined.

The list of involved personnel, the tasks assigned and the qualification status are summarized in the table 3-2 below.

Table 3-2: Involved Personnel

	Name	Company	Function ¹⁾	Qualification Status ²⁾	Scheme competence	Technical competence ⁴⁾	Host country Competence	Team Leading competence	Onsite
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Stefan Winter	TN CERT Germany	TL	A	<input checked="" type="checkbox"/>	1.1/15.2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms.	Jun Wang	TN CERT Germany	TM	A	<input checked="" type="checkbox"/>	-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Ulrich Walter	TN CERT Germany	TR ³⁾	LA	<input checked="" type="checkbox"/>	15.2	<input type="checkbox"/>	<input type="checkbox"/>	-
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Lenzian, Heiner	TN CERT Germany	TR ³⁾	LA	<input checked="" type="checkbox"/>	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-
<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms.	Winter, Rainer	TN CERT Germany	TR/F A	SA	<input checked="" type="checkbox"/>	1.1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	-

¹⁾ TL: Team Leader; TM: Team Member, TR: Technical review; FA: Final approval

²⁾ GHG Auditor Status: A: Assessor; E: Expert; SA: Senior Assessor; T: Trainee; TE: Technical Expert

³⁾ No team member

⁴⁾ As per S01-MU03 or S01-VA070 A2 (such as A, B, C.....)

Certificates of appointment for the above mentioned team members are enclosed in annex 7 of this report.

3.4 Consideration of Public Stakeholder Comments

Acc. to the modalities and procedures the draft POA-DDs, as received from the project participants, has been made publicly available on the dedicated UNFCCC CDM website prior to the validation activity commenced. Stakeholders have been invited to comment on the POA-DD within the 30 days public commenting period.

In case comments were received, they are taken into account during the validation process. The comments and the discussion of the same are documented in annex 5 of this report.

3.5 Validation Protocol

In order to ensure consideration of all relevant assessment criteria, a validation protocol is used. The protocol shows, in a transparent manner, criteria and requirements, means of validation and the results from pre-validating the identified criteria. The validation protocol reflects the generic CDM requirements each CDM project has to meet as well as PoA specific issues as applicable. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements that a PoA is expected to meet;
- It ensures a transparent validation process where the validating entity will document how a particular requirement has been validated and the result of the determination.

The validation protocol as described in Figure 1.

Figure 1: Validation protocol tables

Validation Protocol Table A-1: Requirement checklist				
Checklist Item	Validation Team Comment	Reference	Draft Conclusion	Final Conclusion
<i>The checklist items in Table A-1 are linked to the various requirements the project should meet. The checklist is organised in various sections. Each section is then further sub-divided as per the requirements of the topic and the individual project activity.</i>	<i>The section is used to elaborate and discuss the checklist item in detail. It includes the assessment of the validation team and how the assessment was carried out. The reporting requirements of the VVM shall be covered in this section.</i>	<i>Gives reference to the information source on which the assessment is based on</i>	<i>Assessment based on evidence provided if the criterion is fulfilled (OK), or a CAR, CL or FAR (see below) is raised. The assessment refers to the draft validation stage.</i>	<i>In case a corrective action or a clarification the final assessment at the final validation stage is given.</i>

The completed validation protocol is enclosed in Annex 1 to this report.

3.6 Review of Documents

The published POA-DDs (draft) and supporting background documents related to the programme design and baseline were reviewed.

Furthermore, the validation team used additional documentation by third parties like host party legislation, technical reports referring to the programme design or to the basic conditions and technical data.

3.7 Follow-up Interviews

The validation team has carried out interviews in order to assess the information included in the programme documentations and to gain additional information regarding the compliance of the PoA with the relevant criteria applicable for CDM.

During validation the validation team has performed interviews to confirm selected information and to resolve issues identified in the document review. The main topics of the interviews are summarized in table 3-3.

Table 3-3: Interviewed persons and interview topics

Interviewed Persons / Entities	Interview topics
Project participant representatives Project consultant Government representatives Stakeholders (local farmers)	<ul style="list-style-type: none"> - Chronological description of the programme activity with documents of key steps of the implementation. - Current status of programme design - Technical details of the programme realization, programme feasibility, designing, operational life time, monitoring of the programme - Host Government Approval - Approval procedures and status - Monitoring and measurement equipment and system - Financial aspects - Crediting period - Programme activity starting date - CER allocation / ownership - Baseline study assumptions - Baseline survey - Additionality - Sustainable development issues - Monitoring of CPAs - Analysis of local stakeholder consultation - Roles & responsibilities of the project participants w.r.t. programme management, monitoring and reporting - National Legislation - Editorial issues of the POA-DD and CPA-DDs

A comprehensive list of all interviewed persons is part of section 7 'References'.

3.8 Project comparison

The validation team has compared the proposed PoA activity with similar PoA or CDM projects / technology that have similar or comparable characteristics and with similar projects in the host country in order to achieve additional information esp. regarding:

- Programme technology
- Additionality issues
- Reasons for reviews, requests for reviews and rejections within the CDM registration process.

3.9 Resolution of Clarification and Corrective Action Requests

3.9.1 Definition

A **Corrective Action Request (CAR)** will be established where:

- mistakes have been made in assumptions, application of the methodology or the programme documentation which will have a direct influence on the programme results,
- the requirements deemed relevant for validation of the PoA with certain characteristics have not been met or
- there is a risk that the programme would not be registered by the UNFCCC or that emission reductions would not be able to be verified and certified.

A **Clarification Request (CL)** will be issued where information is insufficient, unclear or not transparent enough to establish whether a requirement is met.

A **Forward Action Request (FAR)** will be issued when certain issues related to programme implementation should be reviewed during the first verification of each CPA.

3.9.2 Draft Validation

After reviewing all relevant documents and taken all other relevant information into account, the validation team issues all findings in the course of a draft validation report and hands this report over to the project participant in order to respond on the issues raised and to revise the programme documentations accordingly.

3.9.3 Final Validation

The final validation starts after receiving the proposed corrective actions (CAs) to the CARs, CLs and FARs from the project participant. The project participant has to reply on all CARs, CLs and FARs and the requests are “closed out” by the validation team in case the response is assessed as sufficient. In case of raised FARs the project

participant has to respond on this, identifying the necessary actions to ensure that the topics raised in this finding are likely to be resolved at the latest during the first verification of each CPA. The validation team has to assess whether the proposed action is adequate or not.

In case the findings from CARs and CLs cannot be resolved by the project participant or the proposed action related to the FARs raised cannot be assessed as adequate, no positive validation opinion can be issued by the validation team.

The CAR(s) / CL(s) / FAR(s) are documented in chapter 4.

3.10 Technical review

Before submission of the final validation report a technical review of the whole validation procedure is carried out. The technical reviewer is a competent GHG auditor being appointed for the scope this PoA falls under. The technical reviewer is 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 validation opinion and the topic specific assessments as prepared by the validation team leader may be confirmed or revised. Furthermore reporting improvements might be achieved.

3.11 Final approval

After successful technical review of the final report an overall (esp. procedural) assessment of the complete validation will be carried out by a senior assessor located in the accredited premises of TÜV NORD.

Only after this step the request for registration can be started (in case of a positive validation opinion).

4 VALIDATION FINDINGS

In the following table the findings from the desk review of the published POA-DD and generic CPA-DD, visits, interviews and supporting documents are summarised:

Table 4-1: Summary of CARs, CLs and FARs issued

Validation topic ¹⁾	No. of CAR	No. of CL	No. of FAR
CDM-POA-DD			
General description of the programme of activities (PoA-A) <ul style="list-style-type: none"> - Programme title and description - PoA Operating and implementing framework - Policy/measure or stated goal of the PoA - Confirmation of voluntary action - Coordinating/managing entity and Participation - Communication with the Board - PP in relation to the PoA - Technical description of the PoA - PoA boundary and locations - Description of a typical CPA - Eligibility criteria for CPA inclusion - Description of PoA GHG emission reduction - Additionality demonstration of the PoA - Operational, management and monitoring plan of the PoA - Public funding of the PoA - POA-DD editorial and consistency aspects 	11	6	0
Duration of the PoA (PoA-B)	1	0	0
Environmental analysis (PoA-C)	0	1	0
Stakeholder Comments (PoA-D)	1	0	0
Application of baseline and monitoring methodology (PoA-E) <ul style="list-style-type: none"> - Application of the Methodology to a typical CPA - Sources and gases within the CPA boundary - Baseline identification - Additionality demonstration of a CPA - Emission reductions Estimation of a CPA - Methodological choices 	14	0	0

Validation topic ¹⁾	No. of CAR	No. of CL	No. of FAR
<ul style="list-style-type: none"> - Equations, ex-ante parameters - To be reported CPA data and parameters - Monitoring Methodology and Monitoring Plan - To be monitored CPA data and parameters - CPA monitoring plan 			
Annexes	0	1	0
Sum	27	8	0
Generic CDM-CPA-DD			
Overall Consistency with finalized PoA-DD	1	0	0
General description of the CDM programme activity (CPA-A) <ul style="list-style-type: none"> - Title and description of the CPA - Entity/individual responsible for the CPA - Technical Description of the CPA - Identification of the CPA - Duration and crediting period of CPA - Estimated emission reduction - Public funding - Confirmation of de-bundling in case of SSC - Confirmation of no double counting - CPA-DD editorial and consistency aspects 	0	0	0
Eligibility of CPA and Estimation of Emission Reductions (CPA-B) <ul style="list-style-type: none"> - CPA reference to the PoA - Justification to CPA inclusion eligibility criteria - Demonstration of CPA additionality - Confirmation of CPA boundary - CPA Emission Reduction - Ex-ante CPA Data an parameters - Ex-ante CPA Emission reduction calculation - Summary of Ex-ante estimation - CPA Monitoring Plan 	0	0	0
Environmental analysis (CPA-C)	0	0	0
Stakeholder Comments (CPA-D)	0	0	0

Validation topic ¹⁾	No. of CAR	No. of CL	No. of FAR
SUM	1	0	0

¹⁾ The letters in brackets refer to the finding titles, corresponding sections in PoA-DD and generic CPA-DD and validation protocol

The following tables include all raised CARs, CLs and FARs. For an in depth evaluation of all validation items it should be referred to the validation protocols (see Annex 1 of this report).

The findings of validation process are summarized in the tables below.

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A1	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The latest version of the CDM SSC-POA-DD form has been applied. However, the front page of the PoA-DD has been altered to two pages rather than original one page from the template. As per footer of the CDM SSC-PoA-DD template, "This template shall not be altered. It shall be completed without modifying/adding headings or logo, format or font", thus the PoA-DD formatting shall be revised accordingly.			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The format has been corrected.			
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. The latest template without alteration has been applied now and no deviation is found as compare to the form on UNFCCC website. CAR PoA-A1 is closed.			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A2	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	There is a description of the general operating and implementing framework of the PoA in section A.2 of the PoA-DD; however, it has not sufficiently explained the functions and correlations of all entities involved, e.g., CME, the SREO and its subsidiaries, the equipment supplier, OASIS, etc. Further correction is necessary.			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The following description has been added in section A.2: The proposed PoA will be managed, implemented, operated and monitored by the Coordinating Entity (C/ME) Chengdu Oasis Science & Technology Co., Ltd. The C/ME will take care of all CDM related tasks.			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A2	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
	<p>This includes the writing of all related documents, quantitative calculation of emission reductions, the management of CDM related procedures like validation, registration and verification, and the allocation of CER revenues for the distribution to the farmers and the technical service network.</p> <p>The technical implementation of the digesters will be done by the Sichuan Rural Energy its subsidiaries, the city, county and village level Rural Energy Offices. The operation of the service network, as well as all necessary surveys and monitoring will be undertaken by the Sichuan Biogas Society under supervision of the Sichuan Rural Energy Office. After the CER revenue has been provided by the C/ME, the Sichuan Rural Energy Office also ensures the distribution of the revenues to the individual households and the service network.</p> <p>Therefore, each CPA will have at two CPA implementers:</p> <ul style="list-style-type: none"> • Chengdu Oasis Science & Technology Co., Ltd • The Sichuan Rural Energy Office <p>The collection and processing of the monitoring data will be carried out by the experts of the Chinese Academy of Agricultural Engineering (CAAE). The final data will then be provided to the C/ME for the writing of the annual monitoring reports.</p>			
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>OK. It has been sufficiently explained the functions and correlations of all entities involved in section A.2 of the PoA-DD:</p> <ul style="list-style-type: none"> • The CME is “Chengdu Oasis Science & Technology Co., Ltd”; • CPA implementers are the CME and the Sichuan Rural Energy Office (SREO); • Technical support will be provided by SREO and its subsidiaries. <p>Functions described in the revised PoA-DD have been crosschecked by validation team during onsite interviews /IM/.</p> <p>CAR PoA-A2 is closed.</p>			
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input checked="" type="checkbox"/> Appropriate action was taken</p> <p><input checked="" type="checkbox"/> Project documentation was corrected correspondingly</p> <p><input type="checkbox"/> Additional action should be taken</p> <p><input checked="" type="checkbox"/> The project complies with the requirements</p>			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A3	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>Section A.2 of the PoA-DD stated that the Stated goal of the proposed PoA is to “enable the poor population of the rural areas in Sichuan to participate in the existing biogas subsidy programme provided by the Sichuan Rural Energy Office” via financial support and technical support from the PoA. However, the description has not sufficiently and transparently provided information regarding how the incentive schemes</p>			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A3	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>from PoA will support to promote the stated goal. Besides, it is unclear on what basis the PoA will "increase the achieved emission reductions" and whether it will have impact on emission reduction calculations. Further clarification is necessary.</p>		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>The PoA-DD will allow the PoA households to construct the digesters. By providing additional income to the households and providing the technical service to make sure that all digesters constructed within the framework of the PoA will perform within the desired parameters, the PoA increases the distribution of digesters and achieves the emission reductions. Without the PoA the households would not install the digesters and therefore not reduce any carbon emissions.</p> <p>The following paragraphs have been added in section A.2:</p> <p>The Sichuan Rural Poor-Household Biogas Development Programme (hereafter referred to as "The proposed PoA") aims to reduce a large amount of greenhouse gases (GHG) by facilitating the installation of a large number of household biogas digesters. To achieve this target, the proposed PoA will generate additional incentives to install digesters to households that are supported by existing subsidy schemes. Target group of the proposed PoA are low-income households located in Sichuan Province, China. The primarily targeted areas are thirteen cities (however, the PoA shall not be limited to this thirteen cities exclusively): Yibin, Neijiang, Suining, Ziyang, Zigong, Ruzhou, Leshan, Meishan, Mianyang, Guang'An, Ganzi, Aba and Dazhou, all of which are located in the lowland areas of Sichuan.</p> <p>(...)</p> <p>During the project activity, each household is equipped with a household biogas digester that will treat the manure anaerobically and recover the generated methane. After installation of the biogas systems, both sources of emissions will be reduced: No methane is emitted from the existing manure management systems, as the manure will be treated within the biogas digesters and furthermore, all recovered methane will be utilized for cooking to reduce the coal consumption of each household.</p>		
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>OK. Section A.2 of the PoA-DD has been revised and described how the incentive schemes from PoA will support to promote the stated goal. Besides, it is clarified that the PoA will promote further installation of household biogas digesters, which will lead to "increase the achieved emission reductions". The revision is deemed appropriate and reflecting the actual situation, which has been confirmed by the validation team during onsite visit.</p> <p>CL PoA-A3 is closed.</p>		
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input checked="" type="checkbox"/> Appropriate action was taken</p> <p><input checked="" type="checkbox"/> Project documentation was corrected correspondingly</p> <p><input type="checkbox"/> Additional action should be taken</p> <p><input checked="" type="checkbox"/> The project complies with the requirements</p>		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A4	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A4	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>A confirmation has been given in section A.2 of the POA-DD that the proposed PoA is a voluntary action coordinated by the CME. However, further information and evidences shall be given regarding the subsidy programme that this PoA seeks to promote, esp. on whether it is also a voluntary subsidy programme and whether there is a limit or target of this subsidy programme.</p>		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>The following two paragraphs have been added in section A.2:</p> <p>To support local households, the Sichuan Rural Energy Office implements the existing governmental subsidy schemes by providing a financial support during the construction of the biogas digesters.. Target of the programmes is to reduce methane emissions from the pits, generate biogas as renewable source of energy and use the digester effluent as high-efficient fertilizer. However, after reaching mid-and high-income families, the Sichuan Rural Energy Office came to the conclusion, that low-income families still face barriers and can not participate in the digester installation programme. Therefore, these households need further promotion to participate in the existing programmes and install a biogas digester.</p> <p>(...)</p> <p>Furthermore, technical difficulties that occur during the operation of household biogas digesters resulted in a low rate of successful long-term operation among the digesters that have been installed in the past. A fundamental reason is that technical support and maintenance of the digesters and related equipment are not covered by the subsidy schemes. Individual technical support for households is expensive and difficult to obtain in remote areas. Therefore, the acceptance of the technology and the willingness to pay for the instalment of bio digesters without guaranteed, regular and proper maintenance is very low.</p>		
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>OK. Statement has been revised in the PoA-DD, furthermore evidences have been provided to show that there is no limit or target for the SREO subsidy programme to implement digesters. The validation team has checked the evidence provided on following links: http://www.ehome.gov.cn/Article/Class1/201005/6801.html http://www.ehome.gov.cn/Article/Class1/201104/7185.html</p> <p>and confirmed that the subsidy programme is on-demand planned, i.e., not mandatory by the central government or Sichuan government, but rather planned by SREO to submit suitable number of households that may be able to install the digester, considering their ability to afford the initial investment after deducting the cost subsidized by the government. Besides, evidence shown that the SREO started considering the CDM revenue while planning for applying the subsidy has been also checked. The same has been further confirmed by the SREO official during onsite visit. CL PoA-A4 is closed.</p>		
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly</p>		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A4	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
	<input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A5	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	As per PoA requesting registration uploading step 4, please include an estimation of annual average emission reductions of the 1 st CPA over the first crediting period in section A.2 of the PoA-DD.			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>The following paragraph has been added in section A.2:</p> <p>As the most obvious and measurable effect, the proposed programme will result in a reduction of carbon emissions. The first CPA (SN: SCHHBG-2010-001) that will be registered with this PoA, is estimated to result in an annual emission reduction of 2,278 tCO₂e and a total emission reduction of 22,780 tCO₂e in the entire 10-year crediting period.</p>			
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>OK. The estimation has been appropriately added to section A.2 of the PoA-DD.</p> <p>CL PoA-A5 is closed.</p>			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A6	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>At draft validation stage, the MoC has not yet been submitted by the PP.</p> <p>Please notice that the MOC shall confirm that Coordinating/managing entity of the PoA communicates with the Board, and all Project participants information in the MoC is consistent with the PoA-DD.</p> <p>Besides, procedures for modalities of communication between project participants and the Executive Board shall apply, with the exception that the coordinating/managing entity shall be either sole or joint focal point for each area of communication. The limit of joint focal points for the programme shall be 5, or equal to the number of host Parties if greater than 5. (EB 55 Annex 38, §11)</p>			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The MoC has been provided to the DOE.			
DOE Assessment #1	Not OK. The MoC has been submitted. However, the information is not consistent with Annex I of the PoA-DD, e.g., the Annex I country has been changed to UK rather than the Germany. Please clarify.			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A6	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Corrective Action #2	Updated MoC is provided.			
DOE Assessment #2	OK. The MoC information has been corrected to be consistent with Annex I of PoA-DD. The Annex I approval has been changed from Germany to UK and a related LoA of United Kingdom has been provided ^{/LOA/} . CAR PoA-A6 is closed.			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A7	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>The letters of approvals from all PoA participants have not yet been provided by the PP at the draft validation stage. All information shall be checked upon the submission.</p> <p>Please notice that each of the written approvals shall confirm the following information:</p> <ul style="list-style-type: none"> i) that the corresponding party is a Party to the Kyoto Protocol; ii) that the participation is voluntary; iii) that the project contributes to the sustainable development in the country (only for host country approval(s)); iv) that the project participant's information is exactly the same as in the PoA-DD; v) that the PoA title referred in the approvals is consistent with the one in the POA-DD submitted for registration, or is there an additional specification of the PoA, e.g. POA-DD version number; vi) that the CME is authorized for its coordination and implementation of the PoA from each Host Party (only for host country approval(s)); vii) that the approvals are unconditional w.r.t. the above points. 			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	HCA from Chinese DNA, National Development and Reform Commission (NDRC) is provided.			
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>HCA of Chinese DNA NDRC has been provided. The HCA is checked and DOE therefore can confirm the following:</p> <ul style="list-style-type: none"> i) that the corresponding party is a Party to the Kyoto Protocol; ii) that the participation is voluntary; iii) that the project contributes to the sustainable development in the country (only for host country approval(s)); iv) that the project participant's information is exactly the same as in the PoA-DD; v) that the PoA title referred in the approvals is consistent with the one in the POA-DD submitted for registration, or is there an additional 			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A7	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
	specification of the PoA, e.g. POA-DD version number; vi) that the CME is authorized for its coordination and implementation of the PoA from each Host Party (only for host country approval(s)); vii) that the approvals are unconditional w.r.t. the above points. However LoA of Annex I country is still pending.			
Corrective Action #2	LoA of UK is provided.			
DOE Assessment #2	LoA of UK DNA Environment Agency DNA Ref: EA/UPM/01/2012 dated 19/01/2012 has been provided. The LoA is checked and DOE therefore can confirm the following: i) that the corresponding party is a Party to the Kyoto Protocol; ii) that the participation is voluntary; iii) that the project participant's information is exactly the same as in the PoA-DD; iv) that the PoA title referred in the approvals is consistent with the one in the POA-DD submitted for registration; v) that the CME is authorized for its coordination and implementation of the PoA from each Host Party (only for host country approval(s)); vi) that the approvals are unconditional w.r.t. the above points. As both LoAs are provided this CAR is closed.			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A8	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The only host party of the proposed PoA is the "People's Republic of China", however the name of the country was not fully correctly listed in section A.4.1.1 of the PoA-DD, minor correction is necessary. Besides, there is no confirmation in section A.4.1.2 of the PoA-DD on whether all applicable national and/or sectoral policies and regulations within Sichuan province have been reflected in determination of baseline. Further information is necessary.			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The name of the host party has been corrected. The following paragraph has been added in section A.4.1.2: All SSC-CPAs that will be included under the SSC-PoA will be within the defined geographical location of the SSC-PoA area and follow applicable national, provincial and/or sectoral policies and regulations in this region.			
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. Name of the host party has been correctly revised. It has been confirmed that all relevant national or sectoral policies and regulations within Sichuan province have been taken into account in determination of baseline. It has also been confirmed by the validation team during onsite interview with SREO. CAR PoA-A8 is closed.			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A8	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A9	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	In section A.4.2.1, the technology applied by the CPA biogas digesters are described; however, following documents need to be submitted: <ol style="list-style-type: none"> 1. the national standards on which the CPA biogas digesters will be based; 2. the certification on the design and construction of the digesters by technicians accredited by the Ministry of Agriculture 3. the Special maintenance procedures developed for the operation of the digesters. 4. The heating purpose of the biogas utilization is unclear, further elaboration is necessary. 5. The typical design of the biogas digester does not provide the possible range of the capacity and efficiency, as well as what design differences will be insignificant to a typical one. 		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<ol style="list-style-type: none"> 1. A table presenting the technical standards relevant for the household digester construction has been added in Section A.4.2.1. Furthermore, a softcopy of the standards is submitted to the DOE. 2. An exemplary record of the technical acceptance record by SREO is submitted to the DOE. This approval certifies the construction of a household biogas digester according to the applicable standards. 3. The maintenance procedures are defined in the provincial standard DB51/T 807-2008. This document is provided to the DOE. 4. The main purpose of the stove is of course the cooking of food. However, as the rural households in Sichuan province usually do not have a build-in heating system, it might also be used for heating purposes during winter. To avoid any misunderstandings, the word "heating" has been deleted from the PDD as this is not the foreseen purpose of the stove. 5. The following paragraph has been added in section 4.2.1: <p>According to the national standard NY/T 465-2001, the standard designs comprise digesters of 6 m³, 8 m³ and 10 m³. The digesters will be constructed and finally approved by engineers accredited by the local Rural Energy System.</p> <p>An exemplary approval record and certificate of one engineer is provided to the DOE.</p> 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A9	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<ol style="list-style-type: none"> 1. OK. The relevant national standards based on which the CPA biogas digesters will be constructed have been properly included as Table 1 in the PoA-DD and are deemed adequate. 2. Not OK. The provided samples are only the 'Check and Acceptance for Provincial Rural Biogas Project in 2010', which does not show to which national or sectoral standards those digesters are successfully built. Besides, to what extent the signatures and stamps from REO can confirm the digester is in line with relevant standards needs to be further clarified. Furthermore, it is unclear whether the Digester ID will be continued by the ones under the CPAs, and how to connect the ID with the physical installation serial number for consistency check shall be explained. 3. OK. The maintenance procedures 'The regulation of using and management on rural household biogas digester' (DB51/T 807-2008) has been provided and is confirmed to be applied under the PoA for maintenance of the digesters. 4. OK. The heating purpose of the biogas utilization has been clarified and removed from the POA-DD, since heating is not accounted for emission reductions, the revision is deemed appropriate. 5. OK. The provided standard NY/T 465-2001 page 14 has shown the 3 capacity parameters of design, and as per the validation team technical expert's assessment, the 3 different volume capacity will have no major difference on output efficiency of the biogas, only the volume of inputs to the biogas digester are directly affecting the biogas output, which are monitored. 			
<p>Corrective Action #2</p>	<p>The following paragraphs have been added to section A.4.2.1:</p> <p>According to the national standard NY/T 465-2001, the standard designs comprise digesters of 6 m³, 8 m³ and 10 m³. All digesters constructed in Sichuan and included into the PoA will follow either this standard or an applicable national or provincial revision or updated that replaced the current standard. The digesters will be constructed and finally approved by engineers certified by Ministry of Agriculture.</p> <p>(...)</p> <p>Qualification of the biogas technicians and technical acceptance of the digesters</p> <p>According a rural biogas construction regulation (Rural Biogas Construction Project Management Regulation), issued by the Ministry of Agriculture in 2003, rural household biogas digesters have to be constructed by certified technicians. In order to get certified, the engineers have to complete a training following a regulation by the Ministry of Labor and Social Security (Profession Standard Number: 5-99-02-01).</p> <p>After the construction, the biogas digesters have to pass a technical acceptance procedure to ensure that they have been constructed properly. This procedure of this acceptance is defined by the provincial standard DB51/T 271.3—2009. The acceptance is performed and recorded by the</p>			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A9	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>local Rural Energy Offices.</p> <p>Digester IDs</p> <p>The biogas digesters in Sichuan are identified by a system of ID numbers. To attach the ID numbers to the digesters, two different systems are used in Sichuan. The IDs are either engraved into the wet concrete of the digesters during construction or are painted on the digesters itself or the wall of the rural household next to the digester. These ID numbers are universal to each digester and will be used to clearly identify the single units for the proposed PoA and will be introduced in more detail in section A.4.4.</p> <p>The ID numbers are to be given to the digesters by the Rural Energy Offices after the final check and will be listed on the technical acceptance records.</p>		
DOE Assessment #2	<ol style="list-style-type: none"> 1. Closed at DOE assessment 1. 2. OK. Evidences of the standards, on which the 'Check and Acceptance for Provincial Rural Biogas Project in 2010', are based, have been provided and are deemed in line with the national and local requirements. Besides, the qualification of the biogas technicians, who signs the "Check and Acceptance" document are confirmed with the rural biogas construction regulation (Rural Biogas Construction Project Management Regulation) provided and stamps from REO are confirmed by the PP as the double confirmation upon qualified technician's check, that the digester is in line with relevant standards. Furthermore, the added description has clarified that the Digester ID will be continued by the ones under the CPAs, and are going to be the same as the ID physically attached to the each digester onsite. 3. Closed at DOE assessment 1. 4. Closed at DOE assessment 1. 5. Closed at DOE assessment 1. <p>CAR PoA-A9 is closed.</p>		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input checked="" type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A10	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>A list of eligibility criteria has been included in section A.4.2.2 of the PoA-DD, however, the following points are still missing:</p> <ol style="list-style-type: none"> a) Methodology applicability requirement of the CPA b) Other methodological / tool requirement of the CPA, c) Technical requirement of the CPA, including procurement d) Confirmation of no double-counting, though the existing criterion No. 4 and 5 have included confirmation requirements from the CPA implementers and households, how to distinguish the already 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input checked="" type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A10	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>implemented biodigesters and the CPA digesters not clearly explained.</p> <p>e) Public funding requirement of the CPA f) CPA start date not before PoA webhosting date g) CPA crediting period not exceed the PoA end date h) Local stakeholder consultation prior to inclusion of the CPA i) Environmental analysis requirement of the CPA j) The additionality assessment criteria for each CPA (as per E.5 particularly in E.5.2 of the PoA-DD are met) k) Monitoring requirement of the CPA l) The CPA shall be approved by the coordinating entity m) Other eligibility criteria applicable for CPA implementation</p> <p>Besides, explanation on how to verify the fulfillment to these criteria needs to be specified, e.g., with minimum example evidence that will be provided during inclusion stage and how they will be checked. Furthermore, following issues shall be clarified regarding the existing criteria:</p> <p>i. No. 2: the terms "CPA operator" and "CPA implementer" are not clearly defined throughout the PoA-DD, and is inconsistently applied, please give clear definition of each in accordance with the PoA requirements, and revise consistently within the PoA-DD and generic CPA-DD as well as real case CPA-DD; ii. No. 4 b): please specify the "latest available average", whether it will be updated regularly every year and each new CPA will apply the new average? Besides, what reliable source will be provided to define the "average" shall be specified and provided; iii. No. 4 c) and d): in case not all households will be visited during inclusion, please specify what evidence or method to prove that all households meet these two criteria; iv. No. 4 f): the 'similar design' is unclear to what extend, and what differences will be considered as negligible the capacity range of the biogas digester shall be provided. v. No. 4 g) and h): it is unclear how to monitor these two criteria to be fulfilled. vi. Eligibility criteria should be updated to ensure that no methane recovery and combustion equipment is transferred from another activity or that the existing equipment is transferred to another activity.</p>		
<p>Corrective Action #1 This section shall be filled by the PP. It shall address the corrective action taken in details.</p>	<p>The list of eligibility criteria has been revised comprehensively. Therefore, an entire new list is provided instead of a response to the single requirements.</p>		
<p>DOE Assessment #1 The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</p>	<p>The eligibility criteria in section A.4.2.2 is deemed revised however the same shall be updated in accordance to EB65 Annex 3.</p>		
<p>Corrective Action #2</p>	<p>Criteria 10 has been extended to 10.1 and 10.2 w.r.t. EB65 Annex 3 §14 (d). No need for stakeholder meeting on CPA level, so no criteria w.r.t. §14 (g). Criterion 14 has been introduced to ensure the data quality of the sampling w.r.t. §14 (j). §14 (l) is satisfied by criteria 7.</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input checked="" type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A10	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
DOE Assessment #2	Ok. The revised eligibility criteria in section A.4.2.2 is deemed appropriate. For detailed assessment refer to Annex 6 of this validation report. CAR PoA-A10 is closed.			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A11	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	In section A.4.3 of the PoA-DD, it has not been sufficiently demonstrated that in the absence of the PoA, the proposed voluntary measure would not be implemented, further clarification is necessary.			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The following paragraph has been added in section A.4.3: As the coordination of the proposed PoA and the management of the two benefits for the rural households (financial support and technical service financed by the CDM) is a voluntary action that is not required by any national or provincial law or regulation, it will not be implemented in the absence of the CDM. By allocating a share of the achieved carbon revenues for management purposes, the CDM provides the financial capacity to manage the proposed PoA and allows its implementation.			
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. The statement added has demonstrated that the voluntary coordinated action to implement bio-digesters in rural area of Sichuan province, esp. focusing on low-income households would not have been implemented without the expected CDM revenue generated from the PoA. The financial support and technical support financed by CDM is key for the PoA to implement. The validation team has also confirmed the statement during onsite visit with the Mr. Wang Hai, General Manager of the CME and SREO officials. CL PoA-A11 is closed.			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A12	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	As per EB55 Annex 1, VVM v1.2, para 166, "The arrangements shall be sufficient to ensure that the coordinating/managing entity will have control of all records and information related to the implementation of individual CPAs and will be in a position to ensure each CPA is being operated in accordance with the specific requirements of the programme"; however, section A.4.4.1 of the PoA-DD does not provide sufficient information			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A12	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
	regarding the requirement, further correction is necessary.			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	A more detailed description of the household database and its minimum data fields has been included in Section A.4.4.1.			
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	Not OK. The finding is asking for CME's responsibility on having control of all records and information related to the implementation of individual CPAs and will be in a position to ensure each CPA is being operated in accordance with the specific requirements of the programme. Further clarification is necessary.			
Corrective Action #2	<p>A description of the management of the local implementation is included in paragraph A.4.4.1:</p> <p>To manage the PoA and all included CPAs, the C/ME – Oasis Chengdu – is responsible for maintaining several databases that hold all relevant information on the CPAs and their households.</p> <p>By organizing regular briefings and project meetings with the rural energy offices, the C/ME will ensure that the local implementers are familiar with the PoA guideline and all relevant tasks. In case of any uncertainties, the C/ME can be contacted in its local office in Chengdu or by any other means of communication to support the local staff.</p> <p>Furthermore, Oasis will also conduct spot checks of recently constructed digesters to ensure that all digesters included into the PoA have passed the technical acceptance. To do so, the initial list of households is compared to the records of the technical acceptance procedures. In case of any conflicts, the C/ME will clarify the open points and provide further support to the offices that manage the groundwork.</p> <p>The ongoing operation of the digesters is part of the monitoring plan and will be determined for the monitoring sample group. The monitoring system will be described in section E.7.2.</p>			
DOE Assessment #2	OK. The added description has clarified that the CME will have control of all records and information related to the implementation of individual CPAs and will be in a position to ensure each CPA is being operated in accordance with the specific requirements of the programme. CAR PoA-A12 is closed.			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A13	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the</i>	1. In section A.4.4.1 of the PoA-DD, the record keeping system is insufficient regarding each individual biogas digesters that will be			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A13	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
<i>context (e.g. section)</i>	<p>included in the CPA, e.g., the contact details of each user, address, the construction time of the digester, serial number of equipment, etc. especially, how to distinguish the already installed digesters with the CPA digesters shall be unambiguously described.</p> <p>2. Besides, the description is also missing for storage area of records and how to process performance documentation, as well as whether the data archiving will be kept for the whole crediting period + 2 years.</p> <p>3. Furthermore, the 'PMO' is not consistent for being 'implementer' since CME and SREO were also mentioned as CPA implementer, consistent description shall be provided.</p>		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>The CPA implementers will be the C/ME and the Sichuan Rural Energy Office. Therefore, the misleading description of the PMO as implementer was removed.</p> <p>Furthermore a description of household database record keeping system was included in Section A 4.4.1.</p>		
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>1. Not OK. More detailed description of household database has been added in section A.4.4.1 of the PoA-DD. However, following issues need to be clarified regarding table 3:</p> <p>a. It does not specify the installation date of the digester, hence cannot confirm the start date of the CPA to be after POA GSP, as well as for how to count each digester that will be installed after the specific CPA inclusion for calculating emission reductions.</p> <p>b. There is no information on serial No. if any, for each Digester, which can be physically recognized onsite and there connection with the Digester ID.</p> <p>2. OK. The description has added 'These databases will be kept as electronic versions in the office of the C/ME in Chengdu and backed up regularly. All data acquired within this data recording system will be kept at least until two years after the end of the crediting period of the PoA.'</p> <p>3. OK. The term 'PMO' has been deleted and it is confirmed that only CME and SREO are CPA implementers, descriptions are deemed consistent now.</p>		
<p>Corrective Action #2</p>	<p>The data table for the household management has been updated to include the date of construction finalization.</p> <p>The following paragraph has been added to section A.4.4.1:</p> <p>Construction finished: To record when the digester construction has been finished and the actual reduction of emission begins, the date of construction finalization will be recorded for each digester. Therefore, it can be ensured, that the digesters only contribute to the emission reduction calculation once they are fully constructed. This parameter will</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A13	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
	be determined after the CPAs have been included to the PoA			
DOE Assessment #2	<p>1. OK. Regarding table 3:</p> <p>a. It has been specified the installation date of the digester, hence can confirm the start date of the CPA to be after POA GSP, as well as for how to count each digester that will be installed after the specific CPA inclusion for calculating emission reductions.</p> <p>b. OK. The digester ID has been clarified in finding CAR PoA-A9.</p> <p>2. Closed at DOE Assessment 1.</p> <p>3. Closed at DOE Assessment 1.</p> <p>CAR PoA-A13 is closed.</p>			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A14	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>1. In section A.4.4.1 of the PoA-DD, the procedure defined to avoid double counting is deemed not sufficient, since it only requires the self commitment of the CPA implementers, but does not prevent any case of double counting in action by the biogas users, neither having a procedure to reimburse any double counted CERs in any case the users or CPA implementers break the contract.</p> <p>2. Furthermore, the de-bundling demonstration is not sufficient, the way of ensure the individual unit to be under 1% of the small scale threshold is not clearly described, and both requirements (600t and 150kW) shall be met, thus the calculation/conversion shall be provided accordingly.</p>			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>The following paragraph has been added in section A.4.4.1 to ensure that no double counting occurs:</p> <p>To further ensure that no double counting occurs due to the participants breaking the signed contract, an additional checking on two levels will be undertaken by the C/ME:</p> <p>1. Internal cross-check procedure: Whenever a new CPA is included in the PoA, the C/ME will confirm that no household is included within the new CPA that is already included in a CPA that has been included previously. To ensure this, comprehensive comparison of the unique digester serial numbers of new CPA and all previous CPAs will be performed and documented.</p>			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A14	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>2. External cross-check procedure: The inclusion of households biogas digesters that are already included in another registered CDM project or CPA of another registered PoA is not possible for the following reason:</p> <ul style="list-style-type: none"> a. All households that construct biogas digesters in Sichuan province will be managed by the SREO. b. The Sichuan Rural Energy Office is the only authority that implements household biogas digesters in Sichuan province. c. The C/ME has signed an exclusive agreement with the Sichuan Rural Energy Office to develop a CDM activity to further support the household beyond the national subsidy scheme using the CDM as a financial resource in the targeted areas. <p>To further prove the validity of this agreement, a cross check of the boundaries of all registered CDM projects and registered PoAs that target the installation of household biogas digesters in rural areas, will be performed and documented. If such CDM project or PoA with an overlapping project boundary is registered and its project documents are available on the official CDM websites, the C/ME will confirm that the new CPA and the existing registered CDM project or PoA do not comprise overlapping households by checking the location of the involved households. In case a published CDM project or CPA comprises the installation of household biogas digesters in cities that are also part of the CPA region of a newly to be included CPA of the proposed PoA, the household databases will be checked in cooperation with the project developer of the respective CDM activity. The data of such check will be available for other relevant CDM projects, due to a regulation that was issued by the Sichuan Rural Energy Office. Before a CDM developer submits CDM documents that include household biogas systems implemented under the national subsidy scheme in Sichuan, to any entity involved in the CDM registration process, he is obliged to submit the household information to the SREO first. This data can then be used for possibly necessary double counting checks.</p>		
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<ul style="list-style-type: none"> 1. Not OK. Section A.4.4.1 of the PoA-DD has further defined the procedure to avoid double counting from CME internal and external check. However, it still does not provide any procedures to, e.g., exclude any identified digester users that are double counted in the CPA from further emission reduction calculation issuance. Please clarify. 2. Not OK. Not answered properly. It shall ensure even with the max. installed capacity of biogas stoves and allowed number of pigs and max. temperature, the 1% threshold is still not going to be exceeded. At PoA stage, it shall already determine the necessary parameters. 		
<p>Corrective Action #2</p>	<ul style="list-style-type: none"> 1. A description on the procedures how to proceed in cases a household is identified that has been included in previous CPAs or 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A14	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>registered third party CDM projects or CPAs has been included:</p> <p>In case during these checks households are found that are identical to households that have already been included in a previous CPA or third-party CDM project or CDM project activity, the respective CPA is set on hold. The responsible REO is contacted to confirm all data. If the data is correct and the household has been included in any prior activity, it will be removed from the databases before the CPA is reactivated and submitted for inclusion. A record on such households will be kept and provided on demand to any DOE during inclusions or verifications.</p> <p>2. The following description has been included to substantiate the eligibility criteria and provide an exemplary calculation.</p> <p>To prove the compliance with both criteria, two checks are performed:</p> <p>1. The capacity threshold of 150 kW will be compared to a biogas stove test report provided as evidence together with the CPA during the inclusion. The stove test record provided to the DOE shows a rated capacity of 2.955 kW. As it is highly unlikely that the stove capacity will increase by more than 5,000%, it can be concluded that the rated capacity of each single household will stay well below the threshold of 150 kW.</p> <p>2. Following the equations derived in Annex 3.3, the emission reduction per methane recovery unit will be calculated for each CPA to prove that the value does not exceed the threshold. To demonstrate the unlikeliness of the emission reduction exceeding the threshold of 600 tCO₂e, the emission reduction due to methane avoidance is calculated exemplary in the following. The formula derived in Annex 3.3 shows, that apart of the methane conversion factor of the baseline manure management system and the number of pigs, all other values are constants. According to the table provided in Annex 3.2, the methane conversion factor depends on the annual average temperature. Therefore, the two input values needed to calculate the emission reduction due to methane avoidance for a single household are the number of pigs and the mean annual temperature. The baseline emission shows a proportional dependence on both factors, which means that for increasing temperature and number of pigs, the emission reductions will also increase.</p> <p>The calculation shall be carried out exemplary for the highest annual average temperatures of all cities in the Sichuan Province in 2008. According to the table provided in Annex 3.2, the highest annual average temperature of 20.6°C (rounded to 21°C for the following analysis) was measured in Panzhihua. Using equation 13, a goal seek analysis to determine the number of pigs in one household for which the threshold of 600 tCO₂e is exceeded</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A14	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>delivers a number of 4040. Even if the annual temperature should increase up to 28°C (This is the maximum temperate listed in IPCC 2006, V4_10_Ch10_Livestock that is used to determine the MCF factor of the baseline manure management system. If the annual average temperature increases above this temperature, the MCF value for 28°C is to be used for the following calculations.), the number of pigs for which the emission reduction passes the threshold is still 2,060. As the database of the first CPA shows, not a single household, neither in the project group nor in the contrast group of 500 households each, exceeded a livestock of 15 pigs.</p> <p>Due to data determined in the preparing studies and the fact, that household biogas digesters are not designed to process the manure of such big number of pigs, it can be concluded that no single household will ever exceed the threshold of 600 tCO₂e.</p> <p>Furthermore, the following addition has been added to eligibility criterion 7:</p> <p>To emission reductions calculated using the formulas derived in Annex 3.3 will be compared to the limit of 600 tCO₂e. According to the analysis carried out in A.4.4.1, this criterion is automatically fulfilled, if no household raises more than 2,060 pigs at the same time (which is far beyond the technical capacity of household biogas digesters). This will be demonstrated using a representative survey.</p> <p>Apart from section A.4.4.1. also eligibility criterion 4.2 includes a threshold for the maximum emission reduction (from methane avoidance), criterion 4.2 has been revised and a detailed explanation and calculation has been provided in Annex 3.2. The new eligibility criterion 4.2 includes a simplified criterion for all CPAs in which boundary the mean annual temperature does not exceed 21°C. For these CPAs, the threshold of 5 tCO₂e is considered not to be exceeded after showing that households screened in the city-based baseline surveys do not have an average number of pigs of more than 33.7.</p> <p>These city-based baseline surveys that will also provide the data necessary for the ER calculation, will be provided for each city in which households are included in the newly to be included CPA. By demonstrating that a randomly chosen number of 500 households do not include a single one with more than 33.7 pigs, it can be demonstrated sufficiently that such households are not included in the respective city.</p>		
DOE Assessment #2	<p>1. OK. Section A.4.4.1 of the PoA-DD has further defined the procedure to avoid double counting from CME internal and external check incl. procedures to exclude any identified digester users that are double counted in the CPA from further emission reduction calculation issuance. The correction is deemed</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A14	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
	<p>appropriate.</p> <p>2. OK.</p> <p>1) The evidence “Test Report on household biogas stove”/TRS/ has been provided and crosschecked by the validation team and confirmed as the rated thermal capacity as 3.26kW and tested thermal capacity as 2.955 kW, both values are far below the 1% of the small scale threshold. Technical expert from the validation team confirms that the 150kW threshold is not expected to be crossed for all household stoves.</p> <p>2) The 600tCO₂e threshold has been confirmed by calculating with the max. average temperature 21 °C in Sichuan province, and also the theoretical highest temperature of 28 °C to determine the max. pig numbers per household allowed to have under each CPA. The calculation has been crosschecked by the validation team and confirmed that a number of 2,060 pigs will be the max. allowed number to not to cross the 600tCO₂e per digester, which is far beyond the max. pig numbers under the representative surveyed households. Hence it can be concluded that the 600tCO₂e threshold will not be exceeded by any CPAs.</p> <p>Besides, the methodology requires an even smaller threshold of 5tCO₂e per digester, which is also calculated with the 21 °C max. average temperature and determined with a number of 33.7 pigs per digester-household. Hence the eligibility criterion has been revised to confirm for those CPAs, mean annual temperature shall not exceed 21 °C and max. number of pigs per household shall not exceed 34, with evidences to be submitted at each CPA level.</p> <p>CL PoA-A14 is closed.</p>			
<p>Conclusion Tick the appropriate checkbox</p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input checked="" type="checkbox"/> Appropriate action was taken</p> <p><input checked="" type="checkbox"/> Project documentation was corrected correspondingly</p> <p><input type="checkbox"/> Additional action should be taken</p> <p><input checked="" type="checkbox"/> The project complies with the requirements</p>			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A15	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding Describe the finding in unambiguous style; address the context (e.g. section)</p>	<p>1. In section A.4.4.1 of the PoA-DD, the management plan does include one function of “Household instruction” under the supervision of the provincial SREO, local REO and CME. However, there is no procedure for keeping maintenance and training records for the users and service support centers.</p> <p>2. Besides, since the current operating framework of PoA is stated as “Tentative”, a procedure shall be established on recording changes of</p>			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-A15	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>the framework of all involved entities' functions.</p> <p>3. Furthermore, clarification is requested whether stakeholder guideline is identical to PoA guideline.</p>		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>Among the documents provided to the DOE is a Service Record Sheet. This record sheet will be distributed among the service stations to keep track of all free services and consultations provided to the project households.</p> <p>The two terms "Stakeholder Guideline" and "PoA Guideline" refer to the same term. The wording has been corrected.</p>		
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>1. Not OK. Template of 'Service Record for Sichuan Rural Household Biogas PoA - Onsite Service from Jan to June in 20xx' has been provided and crosschecked by the validation team, however, in section A.4.4.1 of the PoA-DD, there is still no procedure described for keeping maintenance and training records for the users and service support centers.</p> <p>2. OK. A procedure has been established on recording changes of the framework of all involved entities' functions.</p> <p>3. OK. 'Stakeholder guideline' is revised to 'PoA guideline' to keep consistency, which is deemed appropriate.</p>		
<p>Corrective Action #2</p>	<p>The free technical service will be provided to the farmers to improve the acceptance and performance of the digesters, is provided by independent household biogas service stations that are based on a different organizational structure. Although the Rural Energy Offices have a close cooperation with the service stations, the service system is not part of the CDM-related organization or monitoring structures.</p> <p>During the monitoring studies, the performance of the digesters is checked and digesters that are not operational are excluded for the calculation of emission reductions for the entire monitoring period. These monitoring studies are carried out by the Rural Energy Offices and their staff.</p> <p>As service and monitoring are different and independent systems, the detailed description of the maintenance record system, that is not required for the performance of any CDM related tasks, shall not be included into the PDD.</p>		
<p>DOE Assessment #2</p>	<p>1. OK. Since the service center is not part of the monitoring organization and REO will be responsible for the monitoring studies, as well as the non-operational digesters will be excluded from emission reduction calculation, there is no necessity to include in section A.4.4.1 of the PoA-DD procedures for keeping maintenance and training records for the users and service support centers.</p> <p>2. -3 closed under DOE Assessment 1.</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A15	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
	CAR PoA-A15 is closed.			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A16	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	The CME has proposed a sample number of CPAs to be verified during verification process in section A.4.4.2 of the PoA-DD; however, the statistically sound sampling method/procedure to be used by the DOEs are still not sufficiently described, esp. on the number of biogas digesters rather than the number of CPAs to be sampled. Besides, the “adjustment factor” is unclear about its impact on the total emission reduction calculations, further clarification is necessary. The “ER _{i,y,reported} ” has been double stated.			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The description of the adjustment factor in section A.4.4.2 has been replaced by the following paragraph: Referring to the procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities (EB55, Annex 38), paragraph 6(k), the C/ME opts for a sampling approach of CPA verification. As – in footnote 2 of this document – a guideline for a sampling verification approach will be developed by the CDM EB, but is not available at the time of PDD writing, a procedure that complies with the latest available guideline will be elaborated and provided to the DOE prior to the verification. If no applicable advice by the EB is available at the time of verification, no sampling approach will be applied and all CPA shall be verified.			
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	OK. The revised statement has referred to EB 55 Annex 38 paragraph 6(k) and footnote 2, and has correctly applied the guidance to adopt EB guidance during verification when available; otherwise all CPAs will be verified. This approach is deemed in line with the CDM rules. For further details on the proposed sampling plan please refer to section 5.2.8 of this document. CAR PoA-A16 is closed.			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A17	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	It has been confirmed in section A.4.5 of the PoA-DD that no public funding from Annex 1 countries is provided for the proposed PoA. Thus no ODA will be diverted to the implementation of the PoA. However, it shall be further clarified with the China government subsidy sources.			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-A17	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
	<p>Besides, it shall be confirmed whether there are any bilateral or multilateral fund project participants involved in the PoA, and if yes, the following information shall be provided to the DOE:</p> <ul style="list-style-type: none"> • Full official name of the entity fund; • Name of company managing the fund; • Party(ies) authorizing participation of the Fund; • DNA approval of voluntary participation in the PoA and confirmation that it has ratified the Kyoto Protocol; • DNA authorization of the fund to the project participant (can be combined with the approval document) (EB 55 Annex 1, § 100 (b)) 			
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>The following paragraph has been added in section A.4.5:</p> <p>The source of funding of the subsidy scheme does not comprise international funding or any other form of ODA. Besides, no bilateral or multilateral fund project participants are involved in the PoA.</p> <p>A statement from the Sichuan Rural Energy Office is provided to the DOE.</p>			
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>OK. The evidence 'Statement on the Funds Source of Household Biogas Construction in Sichuan' provided by Sichuan Rural Energy Office dated 22nd February 2011 has been checked by the validation team. It has also been confirmed during the onsite interview, that no ODA is involved in the government subsidy.</p> <p>Besides, statement in A.4.5 of the PoA-DD confirms no bilateral or multilateral fund project participants are involved in the PoA.</p> <p>CL PoA-A17 is closed.</p>			
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input type="checkbox"/> Appropriate action was taken</p> <p><input checked="" type="checkbox"/> Project documentation was corrected correspondingly</p> <p><input type="checkbox"/> Additional action should be taken</p> <p><input checked="" type="checkbox"/> The project complies with the requirements</p>			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-B1	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>As per PoA requesting registration uploading step 4, the start date of a small-scale PoA, must be stated as at least 4 weeks after the estimated submission date, on the date of registration, thus the stated "25/10/2010" is not reasonable as the PoA starting date. Please specify a reasonable date accordingly.</p>			
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>A new starting date - 01/12/2011 – has been specified.</p>			
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>Version 1.4 of PoA-DD. The revised PoA starting date is now provided with 01/12/2011 and deemed appropriate and in line with UNFCCC requirement.</p> <p>However the date is passed therefore CAR still open.</p>			
<p>Corrective Action #1</p>	<p>A new starting date – 15/02/2012 – has been specified.</p>			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-B1	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
DOE Assessment #1	Version 1.5 of PoA-DD. The revised PoA starting date is now provided with 15/03/2012 and deemed appropriate and in line with UNFCCC requirement.			
Corrective Action #2	A new starting date – 10/05/2012 – has been specified.			
DOE Assessment #2	Version 1.6 of PoA-DD. The revised PoA starting date is now provided with 2012-05-10 and deemed appropriate and in line with UNFCCC requirement. CAR closed.			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-C1	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<ol style="list-style-type: none"> It is not clearly indicated in section C.1 of the PoA-DD on which level the environmental analysis will be conducted, esp. the inconsistency between the first and last sentence of the 1st paragraph. Furthermore, there is also no justification on whether the level chosen is representative and reasonable. Besides, the documentation on environmental analysis carried out by the SREO shall be submitted to DOE for crosschecking. The description in section C.2 of the PoA-DD shall also include transboundary impacts if any. The term 'zoonotic diseases' is misleading and the PoA is not replacing 'fuel-wood and straw' as described in other parts of the PoA-DD. Furthermore, the description in section C.3 of the PoA-DD is unclear, esp. the first sentence, and evidence shall be provided that an EIA is not required by the government for the PoA and each CPA. 			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<ol style="list-style-type: none"> The following paragraphs was included in Section C.1: An Environmental Impact Assessment (EIA) for household biogas digesters is not required by the Chinese governmental regulations. However, a basic evaluation of the environmental impacts has been carried out by the SREO on the PoA level. The technology to be installed by the project is the same for all CPA that will be included in the future. The measures applicable to the PoA are clearly defined by the technical standards that apply to the national subsidy that defines the framework for the proposed PoA. Therefore, an analysis on a PoA level that is valid for the entire Sichuan province is considered representative for the entire PoA. The mentioned report is provided to the DOE. The term "zoonotic diseases" refers to diseases that are transmitted from animals to humans and vice-versa (to clearly 			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-C1	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>separate the both types the latter sometimes referred to as anthroponosis). Therefore, the term is not deemed misleading.</p> <p>In fact, the PoA is replacing fuel-wood and straw. This is mentioned at several locations throughout the PDD. However, for the calculation of CERs to be claimed, the replacement of fuel-wood and straw is neglected as the share of non-renewable biomass is estimated to be very small. This is a conservative approach.</p> <p>3. A memo of a meeting between the DOE, the Sichuan Rural Energy Office and the Sichuan Environment Protection Office is provided to the DOE as evidence. This memo, which has been signed by the participating individuals, cites the delegate from the Sichuan Environment Protection Office saying that there is not any law or regulation that would oblige the proposed PoA to any form of EIA. More detailed, an EIA is only required for project activities being implemented at farms of more than 500 animals. The related documents, the “Classification of Construction Project Management Directory of Environmental Impact Assessment” and the “Discharge standard of pollutants for livestock and poultry breeding (GB_18596-2001)” are also provided to the DOE.</p>		
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>1. OK. It is now clearly indicated in section C.1 of the PoA-DD on PoA level the environmental analysis will be conducted. It is also sufficiently demonstrated that all digesters will be installed under all CPAs of this PoA will be within the same technology hence the environmental analysis conducted by the SREO on PoA level is representative for all CPAs.</p> <p>2. OK. The documentation on environmental analysis carried out by the SREO has been submitted to DOE, and the description in section C.2 of the PoA-DD has also mentioned transboundary impacts. The term ‘zoonotic diseases’ and ‘fuel-wood and straw’ have been clarified.</p> <p>3. OK. The description in section C.3 of the PoA-DD has been clarified that no EIA is required for a typical CPA. Evidence of “Classification of Construction Project Management Directory of Environmental Impact Assessment” and “Discharge standard of pollutants for livestock and poultry breeding” have been provided. The validation team has crosschecked and confirmed that only Large- and middle-scale livestock and poultry plants (more than 500 heads of pig) are required to go through the EIA procedure and to treat the waste properly to meet the discharge standard. There is no requirement for rural family cultivates. Besides, during onsite interview, it has also been confirmed by Mr. Zhou from Sichuan Environmental Protection Department, that as for the family breeding, it’s encouraged to reuse the waste but there’s no regulation to enforce farmer to treat the waste or to go through the EIA procedure. So far, the public participation procedure in China is only a certain requirement during the EIA process and no requirement for the project without EIA process.</p> <p>CL PoA-C1 is closed.</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-C1	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-D1	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>1. The justification on why the local stakeholder consultation is done at PoA level and whether it is representative to all users and stakeholders that will be influenced by the PoA is not sufficiently described in section D.1 of the PoA-DD. Besides, the PoA-DD does not include description on whether a stakeholder consultation process is required by regulations/laws in the host country with sufficient evidences.</p> <p>2. In section D.2 of the PoA-DD, a description is given regarding how the stakeholders are invited and comments are complied. However, it has not indicated the type of “delegates of all City and County level Rural Energy Offices of the initial targeted 11 cities”, whether they are representative for all potential users (e.g., the farmers) and local stakeholders (e.g., neighbours) who may be influenced by the PoA, thus further clarification is necessary. Furthermore, records of the stakeholder meeting incl. the questionnaire mentioned shall be submitted to DOE.</p> <p>3. Besides, during global stakeholder consultation period, a comment has been received for this PoA as follows:</p> <p>“... that the funding for each province is decided in Beijing for a 5 five years period without any link to the registration of CDM project in the province. Therefore the amount of public money available for one province during each five years period with/without the CDM project is the same. The grant under government program is 1500 RMB in Sichuan (see PoA-DD documentation), the grant from government under PoA0059 is also 1500 RMB. Thus the number of biodigesters built in Sichuan will be the same with or without the PoA0059.”</p> <p>This comment shall taken into due account by the PP with sufficient clarifications on the additionality.</p>		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>The following text was inserted into Section D.1:</p> <p>No stakeholder consultation is required for the installation of household biogas digesters. As described above, no national or local law or regulation requires an Environmental Impact Assessment for such project. As national mandatory stakeholder meetings are part of the regulations on EIA procedures, no stakeholder meeting is required for household biogas digester installations.</p> <p>As the project comprises the similar installation of digesters throughout the PoA boundary and the CPA-clusters are not combined due to a technical or structural difference, but only due to the CDM regulatory aspects, a random sample of households is considered representative for the entire PoA. Therefore, the stakeholder comments were invited on the PoA level.</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-D1	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>To allow a representative sample of all possible stakeholders to give their comments and concerns about the project, two different types of stakeholder consultations have been conducted:</p> <ol style="list-style-type: none"> 1. Stakeholder meeting for provincial and local Rural Energy Office staff During one meeting, representatives of all local Rural Energy Offices have been invited to be informed about CDM, the proposed PoA and the details of implementation. Afterwards, questionnaires have been handed out to invite comments, questions and concerns about the project. 2. To also invite comments of rural stakeholders, like the farmers themselves, their families and neighbors, questionnaires have been distributed to a representative sample of households. Within the questionnaires, the farmers were informed about the PoA and questions/comments have been asked for. <p>Another level of stakeholder consultation has been introduced. The detailed description of the SREO staff meeting including its questionnaires and their results and a description of a stakeholder consultation on the rural household level has been included in section D.2.</p> <ol style="list-style-type: none"> 3. The general determination and distribution of the governmental subsidy is not determined every five years as the comment stated, but does take place once a year. The central government invites the provinces to submit a plan including a number of digesters that are planned to construct within one year to the Ministry of Agriculture and NDRC. The provinces then set up the plan based on the provincial situation and possibilities of the rural population to construct the digesters. As the maximum subsidy per household is currently (July, 2011) fixed to 1,500 RMB, the maximum amount of subsidy applied for by the province is depending on the number of households that are foreseen to construct the digester. After receiving the provincial plans, the central governments distributes the subsidy based on the figures submitted by the implementing provincial authorities (in the case of Sichuan, this authority is the Sichuan Rural Energy Office). Therefore, the number of households that can afford the installation of the digester (and are therefore included in the initial provincial plan) has a severe impact on the actual construction. As an evidence to prove this statement, the last two annual invitations of the Ministry of Agriculture and NDRC are assessable on the below links: http://www.ehome.gov.cn/Article/Class1/201005/6801.html http://www.ehome.gov.cn/Article/Class1/201104/7185.html To determine the number of households that can be included in a given year of subsidy distribution, the SREO regularly conducts studies on the share of rich households within the biogas-suitable 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-D1	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
	<p>household population in Sichuan.</p> <p>During the past installation of the household biogas digesters, the Sichuan Rural Energy Office realized, that only well-situated households can afford the investment and will install the digesters. Among the households that already installed digesters are hardly any households that are considered poor in the local context.</p> <p>From the data taken in 2008 and 2009, the SREO concluded that for the future years, an additional source of income is necessary for the households to maintain the rate of digester installations per year, as the wealthy households are now nearly all equipped with biogas digesters and only comparably poor households are left without installed unit. However, as these households are will have problems raising the investment, SREO cannot include them in the future installation plan if no further funding can be assured.</p> <p>Two SREO reports from 2008 and 2009 describe the barriers and the inclusion of CDM in SREO's planning of digester construction. In the 2008 report, CDM is mentioned for the first time to support the construction and overcome the existing barriers. In 2009 then, CDM is clearly described to provide the necessary support for the households and the service network to promote the technology and maintain the installation rate. Both reports are provided to the DOE.</p> <p>The household's investment that has to be raised by the households imposes a significant barrier for the households. This barrier can be alleviated by the additional financial support to the households, provided by the PoA. Therefore the households are enabled to plan the digester construction and SREO can increase the amount of subsidy applied for. Eventually, the PoA increases the number of digesters constructed within the framework of the governmental subsidy.</p> <p>Since the number of households that can afford the installation of the digester clearly influences the amount of subsidy that SREO applies for and the CDM was an important part of SREOs consideration since the subsidy year 2010, the PoA is clearly additional and results in more digesters being constructed in Sichuan province.</p>			
<p>DOE Assessment #1</p> <p><i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>1. OK. The justification on why the local stakeholder consultation is done at PoA level and whether it is representative to all users and stakeholders that will be influenced by the PoA has been sufficiently described in section D.1 of the PoA-DD. Besides, the PoA-DD has also included description that a stakeholder consultation process is not required by regulations/laws in the host country since the PoA is not required to conduct EIA. The validation team has also confirmed this during onsite interview with Mr. Zhou from Sichuan Environmental Protection Department, that so far, the public participation procedure in China is only a certain requirement during the EIA process and no</p>			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-D1	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>requirement for the project without EIA process.</p> <p>2. OK. Section D.2 of the PoA-DD has indicated the type of REO staff, besides, another stakeholder consultation has been also conducted by distributing questionnaires to project households and neighboring households who may be influenced by the PoA. Records of the stakeholder meeting incl. the questionnaire mentioned have been checked by the validation team during onsite visit, and it has been confirmed that 109 participants attended the REO staff consultation meeting and 78 questionnaires have been collected and samples of rural household stakeholder questionnaires have been crosschecked and are deemed appropriate and adequately addressed.</p> <p>3. OK. The response to the comment received during global stakeholder consultation period has been provided by PP. The response has clarified the following points:</p> <p>a) the funding for each province is not decided in Beijing for a 5 five years period for the province, but rather planned by the province each year considering suitable households that can install the digester with the government subsidy. Hence, the amount of public money available for one province during each five years period with/without the CDM project is NOT the same.</p> <p>b) The grant under government program is 1500 RMB in Sichuan which has been described in the GSP PoA-DD. However, due to the reason that there is no digester installation target for Sichuan province SREO and the proposed PoA is promoting especially the low income rural households that could not be covered by the subsidy scheme in the past years to have extra support from CDM revenue, the number of bio-digesters built in Sichuan will NOT be the same with or without the proposed PoA.</p> <p>c) Last but not least, the revised PoA applies the Microscale additionality Guidance (EB60 Annex25), and as far as the conditions are met, each household under the microscale CPA will be automatically additional, hence as per the current CDM rule, with or without the government subsidy scheme, the PoA is additional.</p> <p>Furthermore, the argumentation has been also confirmed by the SREO officer during onsite interview conducted by the validation team hence is deemed appropriate and adequately clarified the concerns raised in the comment.</p> <p>CAR PoA-D1 is closed.</p>		
<p>Conclusion Tick the appropriate checkbox</p>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input checked="" type="checkbox"/> Appropriate action was taken</p> <p><input checked="" type="checkbox"/> Project documentation was corrected correspondingly</p> <p><input type="checkbox"/> Additional action should be taken</p> <p><input checked="" type="checkbox"/> The project complies with the requirements</p>		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E1	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-E1	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Related and applicable tools to the applied methodologies should be provided in section E.1 of PoA-DD.			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The <i>Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion</i> that was missing has been added. Furthermore, methodology AMS-III.R has been updated to version 02 and the respective changes have been made within the methodology application.			
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	PoA-DD V1.1: Section E.1 was updated w.r.t. related methodologies and tools. The version number of AMS-III.R has been updated to a valid version, version 02. Besides specification is provided that AMS-III.R and AMS-I.C can be applied together under this PoA. DOE has checked unfccc webpage and meeting report EB53 and confirms that by EB53 para 51 both methodologies can be applied under PoA in combination. Reference to AMS-III.D due to para 2, 8 and 9 as per AMS-III.R has been added. DOE has checked the corresponding methodology and states that reference to AMS-III.D for calculation of baseline and project emissions. Correct reference to Tool to calculate project or leakage CO ₂ emissions from fossil fuel combustion as per AMS-I.C has been added. DOE has checked unfccc webpage and corresponding methodology AMS-I.C. Therefore valid versions of methodologies are applied and reference to applicable corresponding tools has been made. However the title of AMS-I.C version 18 as per PDD is inconsistent with corresponding methodology. Therefore further revision is requested and PP shall ensure that the correct title is applied throughout the PoA-DD.			
Corrective Action #2	The title has been corrected.			
DOE Assessment #2	Version 1.2 of PoA-DD has been updated w.r.t. correct title of AMS-I.C version 18. DOE has checked against the corresponding methodology and found it now consistent.			
Corrective Action #3	PoA-DD has been updated from version 18 to version 19 of AMS-I.C.			
DOE Assessment #3	Version 1.5 of PoA-DD: Methodology AMS-I.C has been updated to version 19 and the respective changes have been made within the methodology application. As the all remaining issues have been solved this CAR is closed.			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-E2	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Following issues w.r.t. justification of the choice of the methodology and applicability criteria have been identified: 1. Revision is requested w.r.t. applicability criterion 1 as the criterion refers to “renewable energy technologies” whereas the provided justification refers to “renewable form of energy”. 2. Clarification is requested why several applicability criteria as per AMS I.C.e.g. §7 are missing.			
Corrective Action #1	The following changes have been made:			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-E2	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>1. The misunderstandable wording referred to by the DOE has been changed towards:</p> <p>As per the eligibility criteria for CPAs presented in section A.4.2.2 the technology installed under a CPA is a renewable energy technology and supplies users with biogas to replace coal. Methodology is applicable.</p> <p>2. All applicability criteria, including criteria that are not applicable to the proposed programme as they refer to other technologies, are discussed in the updated section E.2.3.</p>			
<p>DOE Assessment #1</p> <p><i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>PoA-DD V1.1:</p> <p>1. Ok. Corresponding justification has been updated and is in compliance with the related applicability criterion. It is now referred to renewable energy technology.</p> <p>2. Ok. Section E.2 provides now a list of all applicability criteria as per corresponding methodologies AMS-III.R and AMS-I.C. The DOE has checked the PoA-DD against related methodologies and conforms that the list of criteria is complete. However applicability criteria related to AMS-III.R §3 version 02 as per PoA-DD is inconsistent with methodology.</p> <p>3. Besides the listing of Table 6 starts with Number 9. Clarification requested.</p>			
Corrective Action #2	3. Numbers corrected			
DOE Assessment #2	<p>PoA-DD V1.2:</p> <p>3. Ok. Version 1.2 of PoA-DD has been checked and listing starts now with number 1. Clarification provided.</p> <p>As the all remaining issues have been solved this CAR is closed.</p>			
<p>Conclusion</p> <p><i>Tick the appropriate checkbox</i></p>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-E3	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<p>Description of finding</p> <p><i>Describe the finding in</i></p>	Applicability criteria as per applied methodologies are provided as well as related eligibility criteria have been established. However PDD does not			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-E3	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
<i>unambiguous style; address the context (e.g. section)</i>	provide justification how these criteria will and can be met and by which supporting documents.			
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	All applicability criteria that generally apply to the technology of the proposed programme are reflected in the eligibility criteria for new CPAs (Section A.4.2.2.). In the responding section, exemplary evidence is given in a tabular form for each criterion.			
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>PoA-DD V1.1:</p> <p>A complete set of applicability criteria as per methodology AMS-I.C and AMS-III.R has been provided in section E.2. of POA-DD. Justification for each eligibility criteria was included.</p> <p>As the measure under this PoA is to recover and utilize methane from household manure management systems it is evident that the measure is no co-generation system or co-fired system and therefore exclusion of applicability criteria AMS-I.C. 2, 3, 5 and 6 is deemed reasonable. Further due to the applied measure DOE deems the exclusion of applicability criteria AMS-I.C. 10 and 11 also as reasonable and can confirm by onsite visit that no charcoal or solid biomass is used in any of the checked digesters.</p> <p>DOE can confirm by onsite visit that involved household digesters under this PoA are newly installed. This is also covered by eligibility criteria 6.4. And DOE therefore considers this criteria as met.</p> <p>DOE can confirm that applicability criteria AMS-I.C. 7 is met based on onsite visit which showed that biogas is only used to meet own demand and based on conducted interviews ^{/IM01/, /IM02/, /IM03/} that biogas generated by household digester is just sufficient for own demand.</p> <p>For applicability criteria AMS-I.C. 1, 3, 4 and 9 as well as AMS-III.R 1, 2, 3, 4 and 5 related eligibility criteria are established to ensure their compliance.</p> <p>Based on submitted PoA-DD besides unfccc webpage DOE confirms that the proposed PoA the methodology combination AMS-III.R and AMS-I.C and is therefore in compliance with applicability criteria AMS-III.R 3.</p> <p>As the related applicability criteria are all met this CAR is closed.</p>			
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements			

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD	
Finding	PoA-E4	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL	<input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>Following issues w.r.t. Sources of GHG emissions involved in the project boundary have been identified:</p> <ol style="list-style-type: none"> 1. Clarification and justification is requested that the generation and destruction of biogas is CO₂ neutral. 2. Clarification and justification is requested that decomposition of organic waste is CO₂ neutral especially under the context of anaerobic digestion where next to CO₂, CH₄ is produced. 3. Besides clarification is requested w.r.t. project or leakage emissions due to replacement of equipment, sludge application, electricity consumption or transportation of sludge. 4. Further clarify why baseline includes thermal energy used for heating by burning coal or other fuels, but project emissions do 			



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E4	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	not include heating.		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>The following changes have been made to clarify the four questions:</p> <ol style="list-style-type: none"> Two references have been given to a) justify that biogas is a renewable form of energy and b) its generation and destruction is carbon neutral: <ul style="list-style-type: none"> UN-Habitat – Renewable energy <i>Biogas is a mixture of methane and carbon dioxide that is generated from organic material broken down through the anaerobic digestive process. This can be a dry process without water in which the bacteria degrades waste to produce biogas: a renewable energy source. (...)</i> http://www.unlao.org/UNCT/UNHABITAT/docs/Brochures/Renewable%20energy.pdf Ecosense – Forum for sustainable development of German business: <i>Biogas: Biogas is methane, which is produced by the fermentation of organic material such as animal dung, human sewage, organic waste or crop residues in an airtight environment. Biogas is considered to be carbon neutral, since the carbon in biogas feedstocks has already been extracted from the atmosphere by the photosynthesis of plants. Hence, in contrast to fossil fuels, biogas is assumed not to add any additional carbon to the global carbon cycle.</i> http://www.climate-policy-map.econsense.de/en_glossar.aspx Furthermore, the application of the methodology AMS-I.D <i>Grid connected renewable electricity generation</i> to project activities using biogas technologies has been accepted by the CDM EB several times without questioning the renewable character of biogas. It therefore seems to be common practice to consider biogas as carbon neutral. The respective paragraphs only refer to the CO₂ emitted from the existing AWMS and the biogas digesters respectively. The CH₄ emissions brought up correctly by the DOE are considered in the respective rows of the table. However, to avoid any misunderstandings, the wording is corrected towards: <ul style="list-style-type: none"> Excluded as the CO₂ generated during the decomposition of organic waste has been extracted from the atmosphere during the generation of the organic material. Therefore, this circle is CO₂ neutral. All emission sources covered by the methodologies are covered in the respective table. For completeness, the possible sources of project or leakage emissions are discussed below: <p>Electricity consumption: The technology of household biogas digesters does not consume any amount of electricity. Even stoves or other combustion devices that might be installed by the households do not consume electricity. Therefore, this source of GHG emission can be</p> 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E4	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>excluded.</p> <p>Application of sludge: The methodology does not foresee or provide methods to calculate project or leakage emissions due to sludge application. In line with the applicability criteria of the methodology, the farmers are instructed how to apply the sludge without the occurrence of project emissions. The sludge application will also be part of the monitoring plan. The emission reduction for each monitoring period will be scaled with the fraction of households that applied the sludge correctly. Therefore, no project or leakage emissions due to sludge application are taken into consideration.</p> <p>Transportation of sludge: The sludge is not transported, as the biogas digesters will be installed directly at the households. This is inline with the methodology, which does not provide any solution to calculate project emissions for the case of sludge transportation.</p> <p>Replacement of equipment: All digesters are constructed newly, which is certified by the technical acceptance records. They can therefore not be transported from other places.</p> <p style="padding-left: 40px;">Furthermore, the cooking stoves commonly used in the project area are fixed in the households and are not transportable as well. Therefore, leakage due to equipment replacement can be excluded.</p> <p>4. This misunderstanding was based on an imprecise wording. The wording has been corrected.</p>		
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>PoA-DD V1.1:</p> <ol style="list-style-type: none"> 1. Ok. Clarification w.r.t. generation and destruction of biogas is CO₂ neutral is provided and corresponding evidence is provided. 2. Ok. Clarification is provided and revision has been conducted. 3. Not ok. Leakage due to replacement of equipment is considered in section E.6.2 along with justification and covered by eligibility criterion 3.1 a), 3.2 a) and 6.4 (section A.4.2.2) which requires the installation of a new household biogas digester. Project and leakage emissions due to sludge handling are covered by eligibility criterion 4.4 (section A.4.2.2) which requires that sludge must be handled aerobically. Transportation of sludge does not have to be considered as per AMS-III.R and DOE can confirm by onsite visit that digesters are constructed next to household and DOE also can confirm by onsite visit that final sludge is removed from digester manually. However based on AMS-III.R §7 the Table 8 in PDD should describe and clarify project emissions from electricity for the operation of the system. 4. Ok. Clarification is provided. Baseline emissions due to thermal energy used for heating by burning coal have been excluded. 		
<p>Corrective Action #2</p>	<p>3. Table 8 has been updated to discuss project emissions from</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E4	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	electricity consumption. However, as household biogas digesters and the attached cook stoves do not use electricity, this item is excluded.		
DOE Assessment #2	<p>PoA-DD V1.2:</p> <p>3. The overview of GHG emission sources, Table 8, has been updated accordingly and includes now potential project emissions from electricity consumption from project equipment. DOE can confirm by sectoral knowledge and experience besides onsite visit that the project equipment does not consume any electricity for its operation. Therefore the exclusion is deemed reasonable and plausible.</p> <p>As the overview of GHG emissions covers now all potential sources for baseline and project emissions and as all remaining issues have been successfully solved this CAR is closed.</p>		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E5	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>Following issues w.r.t. section E.4, baseline scenario, have been identified:</p> <ol style="list-style-type: none"> 1. Corresponding literature and sources of information for the determination of baseline scenario especially for section E.4. are not referenced in the PDD. 2. Besides justification is requested that not a less carbon intensive fuel is used in the baseline of AMS I.C. 		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<ol style="list-style-type: none"> 1. References have been included and the documents are provided to the DOE. 2. For the CPAs, a baseline survey determines the annual coal consumption of the rural households in the respective CPA regions. Although the fuel mix comprises different sources of energy like coal, gas, electricity and firewood, only the reduction of coal consumption is accounted for as emission reductions. Even where other fuels are reduced beyond the reduction of coal, these emission reductions are not claimed for in the form of CERs. This approach is conservative. 		
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>PoA-DD V1.1:</p> <ol style="list-style-type: none"> 1. Ok. PP has provided related supporting documents to substantiate the determination of the baseline scenario. DOE has crosschecked the provided literature and source and concludes that it contains the corresponding information w.r.t. baseline fuel used, coal and manure storage. Besides eligibility criterion 6.2 is established to ensure the baseline scenario as described in 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E5	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>section E.4 of the PoA-DD.</p> <p>2. Ok. Further specification has been provided in the PoA-DD. Besides Supporting literature and sources have been included and provided which substantiate that coal is used in the baseline scenario. Furthermore eligibility criterion 6.3 is established which requires that a participating household uses coal as energy source for cooking in the baseline scenario. Finally DOE can confirm by onsite visit that baseline fuel is coal and not any less carbon intensive fuel.</p> <p>As both points have been successfully closed this CAR is closed.</p>		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E6	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>Further clarification is requested why section E.6.1. states that “throughout the sections E.6.2 to E.7.2” §27 and §39 for baseline and §45 and §46 for leakage as per AMS I.C will be applied but following section do not refer to these paragraphs anymore.</p> <p>Besides section E.6.2 calculates the baseline not based on §27 and §39 of AMS-I.C.</p> <p>Finally the choice whether leakage is determined as per Attachment C of Appendix B of simplified modalities and procedures or following the procedures as per AM0042 is missing and requested.</p>		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>Sections E.6.1 and E.6.2 have been revised in the latest version (1.1). The baseline calculation is based on paragraph 13 of AMS I.C. The references to paragraphs 27 and 39 have been included in the original version of section E.6.1. by accident and have been removed.</p> <p>Furthermore, to determine possible leakage emissions, the General guidance on leakage in biomass project activities(Attachment C to Appendix B) has been applied. Therefore, the following paragraphs have been included in section E.6.2:</p> <p>Furthermore, AMS I.C refers to the <i>General guidance on leakage in biomass project activities</i> (Attachment C to Appendix B) to determine possible leakage. Following this guidance, the animal manure, kitchen and toilet wastes that are fed into the digesters are identified as “Biomass residues or wastes”. For this type of biomass, only leakage occurring due to competing use of biomass has to be considered.</p> <p>Although the animal manure is used as fertilizer in the baseline scenario, no leakage emissions are considered. As the utilization within the biogas digester and the direct application as fertilizer are no competing forms biomass utilization as the digester effluent can also be applied as fertilizer after the biogas generation. In fact, the digester effluent is an even more effective fertilizer than the raw animal manure. Therefore, the leakage emissions according to the <i>General guidance on leakage in biomass project activities</i> are assumed 0.</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E6	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>PoA-DD V1.1 has been updated accordingly. It is now correctly referring to §13 of AMS-I.C only for the calculation and determination of of baseline emissions. PoA-DD was also updated w.r.t. attachment C to Appendix B of their general guidelines. Description regarding potential leakage in biomass project activities has been implemented. Further the DOE concludes that the utilized under this PoA is a residue and waste stream from agriculture and therefore inline with Annex 8 of the twentieth meeting of the EB defined as a biomass residue. This is confirmed by onsite visit. PP has furthermore provided justification that the utilization does not result in reduction of carbon pool. DOE by their sectoral knowledge and experience and checking the corresponding provided supporting document and confirms that the utilized biomass is renewable and that there is no significant decrease in fertilizer amount to the baseline scenario. Therefore this CAR is successfully closed.</p>		
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements</p>		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E7	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>PoA-DD does not provide any information on prior consideration of CDM e.g. key events of project development and realization. Besides supporting documents shall be provided to that host country DNA and UNFCCC is informed of the intention of this PoA to seek CDM status within 6 months of project starting date.</p>		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>The Guidelines on the demonstration and assessment of prior consideration of the CDM, v. 03 – EB49, Annex 22, states that: <i>(...) Such notification is not necessary if a PDD has been published for global stakeholder consultation or a new methodology proposed to the Executive Board for the specific project before the project activity start date.</i></p> <p>Furthermore, the Validation and Verification v.1.2 – EB55, Annex1 states in paragraph 98: <i>If the project activity start date is prior to the date of publication of the PDD for stakeholder comments it shall be demonstrated that the CDM benefits were considered necessary in the decision to undertake the project as a proposed CDM project activity.</i></p> <p>According to EB55 Annex 38: <i>Confirmation that the start date of any CPA is not, or will not be, prior to the commencement of validation of the programme of activities, i.e. the date on which the CDM-POA-DD is first published for global stakeholder consultation.</i></p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E7	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>As the start dates of any CPA cannot be prior to the publication of the PoA-DD for stakeholder comments, the demonstration of prior consideration of CDM is therefore not required.</p> <p>This interpretation was confirmed by an email from the CDM team of the UNFCCC Secretariat from 21/10/2010:</p> <p><i>Dear Mr. Huenteler,</i></p> <p><i>With reference to your mail below, we would like to inform you that it is not a requirement to submit a Prior Consideration Form for a PoA or for specific CPA of that particular PoA.</i></p> <p><i>Please note that according to EB55 Annex 38: "Confirmation that the start date of any CPA is not, or will not be, prior to the commencement of validation of the programme of activities, i.e. the date on which the CDM-POA-DD is first published for global stakeholder consultation.</i></p> <p><i>We hope that it is helpful.</i></p> <p><i>Kind regards,</i></p> <p><i>Your CDM team</i> <i>UNFCCC secretariat</i></p> <p>This email was provided to the DOE as a print out.</p>		
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>PoA-DD V1.1: No CPA possible prior to GSP as per EB55 Annex 38 §7 (d). Besides supporting document is provided that confirms that it is no requirement to submit prior consideration form to UNFCCC^{/PC/}. CAR successfully closed.</p>		
<p>Conclusion <i>Tick the appropriate checkbox</i></p>	<p><input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements</p>		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E8	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>The following issues w.r.t. demonstration of additionality as per section E.5.1 of PoA-DD have been identified:</p> <ol style="list-style-type: none"> Supporting documents and evidences to substantiate arguments applied to demonstrate additionality are pending in whole section shall be provided, e.g. <ul style="list-style-type: none"> equipment and installation costs, poor technical performance of installed digesters, biogas output decreases throughout the years, costs for coal stove, investment horizon of 10-years is appropriate, performance of the digester is unstable that varying levels of gas production is not due to climate influences etc. 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E8	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>2. It is stated that the average per capita income in Sichuan Province in 2009 was 4,534.18 RMB. PP should explain that this value is applicable based on the fact that the PoA is not targeted to the entire inhabitants of Sichuan Province but local farmers.</p> <p>3. Clarification is requested w.r.t. the definition of an “average household” mentioned on P. 26 and section E.5.2 within this PoA.</p> <p>4. Further specification and revision is requested w.r.t. whether the stated financial analysis is representative and applicable to the range of biogas digesters (8 m³ to 15 m³).</p> <p>5. PP should further justify and specify that the benchmark analysis is the appropriate method to demonstrate financial barrier under the special PoA circumstances (“non-productive” investment).</p> <p>6. Prior to Table 7 and 8 PP should provide corresponding benchmark along with its source and justification of applicability under project related circumstances.</p> <p>7. Source for all values as stated in Table 7 should be provided.</p> <p>8. Further specification is requested for following parameters in Table 7:</p> <p>a) Whether the stated coal saving are per year, for investment horizon of 10 years or crediting period.</p> <p>b) annual maintenance costs</p> <p>9. Table 7 states “Coal costs” which should be clarified as a price in RMB/ton is stated.</p> <p>10. The text prior to Figure 4 states that the sensitivity analysis is conducted for a range of +10% to -10% whereas the following Figure 4 and Table 9 provide results for range of +15% to -15%.</p> <p>11. PP should clarify the relevance of following paragraph w.r.t. financial analysis: “The Service Network Plan allocates governmental funds to install service networks that shall offer technical service to the households. However, the service centres that have been set up only offer commercial services to the farmers and have an insufficient geographical density. For these two reasons, the service centres did not lead to improved digester performance and farmers’ trust in the new technology remains low.”</p> <p>12. The corresponding financial spreadsheet should be provided.</p> <p>13. Further specification and clarification is requested why an operational rate within desired parameters of “only 82%” is considered low?</p> <p>14. Clarification is requested w.r.t. which extent it is relevant that farmers have access to improved technologies and management methods to overcome the stated technological barrier. Besides which improved technology for small scale biogas digester is available on the market.</p> <p>15. Clarification is requested w.r.t. statement provided that “the geographical density of service network <u>was</u> limited and insufficient”. Which improvement already took place considering that the PoA has not started yet?</p> <p>16. PP should specify and justify that the service network could not reach its full capacity yet. Besides provide information what would be necessary to reach full capacity along with supporting documents.</p> <p>17. Section E.5.1. states that the technological barrier is twofold. Therefore specification is requested w.r.t. whether these stated technological barrier is additional to increased maintenance costs (“costs exceed farmers financial means”) or reduced revenue</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E8	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
		<p>(“due to decreasing gas output”) which could be or is already covered by the financial analysis.</p> <p>18. Further specification and justification is requested that the allocation of 10% of the CER revenue will cover the costs for maintenance service to offer the service for free. What QA/QC procedures are or will be installed to ensure that service is offered for free and/or for the administration of the allocation of these revenues?</p> <p>19. PP should further specify how the implementation of the PoA will lead to increased maintenance service as it is not clearly demonstrated that additional services stations are to be considered in contradiction to the statement provided that “the geographical density of service network was limited an insufficient”.</p> <p>20. Based on benchmark approach applied clarification is requested w.r.t. whether the operational lifetime of the installed equipment extends the investment horizon and the applicability of a fair value at the end of the investment horizon.</p> <p>21. Based on benchmark approach applied further specification is requested whether equity IRR is calculated pre-tax or post-tax and that the type of benchmark is applicable for the calculated type of IRR.</p> <p>22. Based on benchmark approach applied specification is requested whether the part of the investment costs, which is financed by equity considered as net cash outflow and is the part financed by debt excluded in net cash outflow.</p> <p>23. If applicable Section E.5.2 should be updated w.r.t. stated findings as above.</p>	
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>Following the new Guidelines for demonstrating additionality of microscale project activities, EB60, Annex 25, the entire demonstration of additionality was restructured and is now following a new approach. The additionality will be demonstrated by demonstrating the applicability of the above mentioned new guideline within the key criteria for the additionality of a CPA in section E.5.2. and respectively updated applicability criteria for the inclusion of a new CPA in section A.4.2.2.</p>		
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>PoA-DD V1.1: As the PP has switched to EB60 Annex 25 for demonstration of additionality initial findings are not relevant anymore. Eligibility criteria 12.1 through 12.3 and 13.1 through 13.3 are established to ensure compliance with EB60 Annex 25 and are outlined in section E.5.1 of PoA-DD. These key criteria are also outlined in section E.5.2. For assessment of those please refer to related Annex 3 table A-3. Besides DOE has checked the new approach against EB60 Annex 25 and following issues have been identified:</p> <ol style="list-style-type: none"> 1. Clarification is requested w.r.t. the use of terminology “guideline 8” or “guideline 2”. 2. Clarification and specification is requested w.r.t. the maximum output capacity refer to EB60 Annex 25 §2. c. i. and maximum methane avoidance refer to EB60 Annex 25 §4. b.i. of a subsystem installed under this PoA. <p>The issues may also be considered during revision of section E.5.2. where applicable.</p>		
<p>Corrective Action #2</p>	<ol style="list-style-type: none"> 1. The term “guideline 8” is referring to guideline 8 of EB60, Annex 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E8	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>25. The term “guideline 2” is referring to guideline 2 of EB60, Annex 25.</p> <p>2. Since the limitations to stove capacity and the methane avoidance occur in a identical manner already in the discussion of the possibility of a de bundled project activity, these clarifications are provided in section A.4.4.1 of the PDD. References to this section have been included.</p>		
DOE Assessment #2	<p>PoA-DD V1.2:</p> <p>1. Not ok. Still unclear.</p> <p>2. Ok. Clarification has been provided. Correct reference to other section in PoA-DD is provided where related information is described and justified. Section A.4.4.1. states that the capacity of a stove is 2.955kW. DOE has checked related stove test record^{/TEST/} and confirms the maximum stove capacity.</p>		
Corrective Action #3	<p>1. The word “Guideline” is replaced to “paragraph” for clarity.</p>		
DOE Assessment #3	<p>PoA-DD V1.3</p> <p>1. Ok. Clarification is provided the term guideline is replaced by paragraph.</p> <p>As all outstanding issues are closed this CAR is closed.</p>		
Conclusion <i>Tick the appropriate checkbox</i>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input checked="" type="checkbox"/> Appropriate action was taken</p> <p><input checked="" type="checkbox"/> Project documentation was corrected correspondingly</p> <p><input type="checkbox"/> Additional action should be taken</p> <p><input checked="" type="checkbox"/> The project complies with the requirements</p>		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input checked="" type="checkbox"/> real case CPA-DD
Finding	PoA-E9	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>The following issues w.r.t. ER calculation as per section E.6 of PoA-DD have been identified:</p> <ol style="list-style-type: none"> 1. For baseline emissions after headline for AMS III.R and AMS I.C states that four steps are applied to calculate baseline emissions but thereafter only 3 Steps are stated. Therefore clarification and revision is requested. 2. Clarification is requested whether only one category of livestock is covered under the PoA as e.g. equation 3 does not distinguish between different livestock categories. 3. Clarification is requested w.r.t. “average swine population per household in city k”. According to AMS III.R the “annual average animal population (NLT)” shall be monitored, therefore clarification and revision to comply consistency is requested. Besides section E.6.2 states that the average swine population “before the installation of the biogas digester” is applied. Justify and confirm that this will lead to real, measureable and conservative emission reductions and why the number before the installation is applied as this is a monitoring parameter. 4. Specify the parameter 1/1000 in equation 4 of section E.6.2. 5. Baseline emissions under AMS I.C, step 2: clarify which “national specific emission factor for raw” is applied. Besides the exact 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input checked="" type="checkbox"/> real case CPA-DD
Finding	PoA-E9	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>source of carbon content and net calorific value as per table under step 2 should be provided. Finally justification is requested that the fossil fuel type used in baseline scenario is raw coal with stated chemical properties and not a less carbon intensive fuel is used.</p> <ol style="list-style-type: none"> 6. During onsite visit it has been identified that two types of fossil fuels are used by farmer either raw coal or honeycomb coal. Clarification and specification is requested that the stated emission factor represents both types of fuel. 7. Clarification is requested w.r.t. equation to calculate bundled baseline, project and emission reduction as the “per household” emissions are multiplied by total number of households and the sum of those is taken. 8. Clarification is requested why the average swine population before the installation of biogas digesters is applied to calculate project emissions? 9. Inconsistency between PoA-DD and AMS I.C for the determination of project emissions has been identified. AMS I.C as per §43 requires the calculation of project emissions from onsite consumption of fossil fuels by using latest version of “Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion” as the PoA-DD does not reflect this. Besides PoA-DD does not provide any statement w.r.t. other project emissions as per AMS I.C. Hence clarification and revision is requested. 10. Clarification is requested w.r.t. Emission reduction calculation as per section E.6.2.. how the survey as per AMS III. R §9 with a confidence of 95% integrates necessary obtained parameter values for e.g amount of waste or raw materials that would decay, fuels and livestock population. 11. Section E.6.2. does not provide any information on Leakage as per AMS III.R and AMS I.C in general. Therefore revision is requested. 12. Carbon content and NCV instead of emission factor of a fuel should be provided as parameters. 13. The emission factor and baseline fossil fuel use is predefined and fixed for all CPAs under the PoA as per section E.6.2. Therefore PP should justify that the baseline fuel consumption and type of fuel used will not change with time when including subsequent CPAs. 14. Clarification is requested why six fixed parameters and parameter tables are provided in section E.6.2 of PoA-DD and why they are not reported by each CDM-SSC-CPA and therefore included in section E.6.3. 		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>The ER calculation has been revised comprehensively. The clarifications on the findings are as follows:</p> <ol style="list-style-type: none"> 1. This mistake has been corrected. 2. Pigs are the predominant livestock in Sichuan. Although most of the households also raise chicken, they are not considered for the calculation of the baseline, as their manure is usually not fed into the digesters, but dropped by the chicken outside of any confined environment. Cows are not considered as well, as only very few of the poor households can afford a cow and the statistics of the baseline surveys would be difficult to manage with a sufficient quality. This approach is conservative. 3. The average swine population before the installation of the digesters is applied ex-ante, while the actual value is part of the 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input checked="" type="checkbox"/> real case CPA-DD
Finding	PoA-E9	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>monitoring and will be applied after the monitoring. This is in line with the methodology.</p> <ol style="list-style-type: none"> 4. After the revision, this factor is obsolete. 5. The carbon content and NCV for raw coal published by NDRC are used for the calculations. The link to the precise source of data is provided in section E.7.1. 6. Honeycomb coal is made of raw coal. The baseline survey calculates the total amount of coal using the raw coal content of honeycomb briquettes. Therefore, one value is applied in the calculations. 7. The sum was not taken over all households, but over all cities that are included in the CPA boundary. After the revision, this is now obsolete. 8. The typo has been corrected. 9. The calculation has been revised. The other possible project emissions that are named in the methodology are not applicable to this project, as no electricity is consumed and no other emissions associated with the project activity occur with or without its boundary. 10. The baseline survey is provided to the DOE. All relevant descriptions are provided in there. Due to a new methodology version, the level of confidence is 90%. 11. The discussion of possible leakage is included. 12. Corrected. 13. As the project takes into consideration only the emissions from coal, the type of fuel cannot change during the PoA lifetime. If the fuel mix in Sichuan should change, this will be detected in the next baseline survey and thereby, the amount of coal used will be adjusted. However, no emission reductions that occur due to the replacement of other types of fuel are taken into consideration. This approach is conservative. 14. The parameters are included in the CPA-DD. 		
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<ol style="list-style-type: none"> 1. Ok. As the section has been revised this mistake is not evident any more. 2. Ok. DOE can confirm by onsite visit that the predominant livestock of related households under this PoA is pigs. Even though some of related farmers also raise chicken and very few a cow their manure is not fed to the digester as chicken and cows are not raised in barns. 3. Ok. PDD has been revised the annual average swine population before the installation is applied for the ex-ante emission reduction calculation and the average swine population at every household is also monitored and is applied for emission reduction determination at verification stage. The value is obtained via a sampling monitoring survey with 90/10 confidence level. 4. Ok. According to updated PoA-DD the emission reduction calculation has been revised in a way that this parameter/factor is not included anymore. Therefore this point is closed. 5. Not ok. The unclear description has been clarified in updated PDD inline with corresponding methodology. Exact source of data applied is provided in PDD. However as per EB41 Annex 11 the eligibility of these data should be clarified as EB41 Annex 11 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input checked="" type="checkbox"/> real case CPA-DD
Finding	PoA-E9	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>states that national or regional data can only be used for liquid fuel. DOE can confirm that raw coal is used by onsite visit and conducted interviews with farmer^{/IM03/}. Even though the most conservative emission factor for coal as per IPCC Guideline^{/IPCC/} is applied.</p> <p>6. Ok. Clarification provided. DOE confirms this by onsite visit and interview with farmers and local authorities^{/IM02/, /IM03/}. Even though the most conservative emission factor for coal as per IPCC is applied.</p> <p>7. Not ok. The determination of MS% “share of households”.</p> <p>8. Ok. As the emission reduction calculation section was revised entirely this mistakes is not evident any more.</p> <p>9. Ok. Updated PoA-DD includes now project emissions due to AMS-III.R §7 and §8, fossil fuel and electricity consumption besides physical leakage, as well as AMS-I.C project emissions due to fossil fuel consumption. DOE can confirm via onsite visit and based on review of technology description^{/Stand/} as per Figure 2 of PoA-DD that the operation of the small biogas digester does not involve use of fossil fuel or electricity consumption. As per conducted interviews^{/IM03/} the digesters are emptied manually. Physical leakage is determined in compliance with AMS-III.R and subsequently as per equation from AMS-III.D §13.</p> <p>10. Ok. The related survey documentation has been provided. DOE has checked the latest version of methodology and confirms that the confidence level was reduced to 90%. The DOE has checked the survey and confirms that the survey integrates necessary parameters.</p> <p>11. Ok. Leakage description as per corresponding methodologies has been provided.</p> <p>12. Ok. The emission factor has been removed from section E.6.2. The emission factor and the net calorific value are determined as monitoring parameters and provided in section E.7.1.</p> <p>13. Ok. DOE by onsite visit can confirm that the households in Sichuan province use only raw coal as baseline fuel. In case the baseline fuel is adjusted the amount of baseline fuel consumption in subsequent CPAs is adjusted correspondingly as this parameter is determined for each CPA. Therefore DOE considers the approach as reasonable and conservative.</p> <p>14. Ok. PDD has been revised accordingly. The related parameters have been deleted in section E.6.2 and provided in section E.6.3.</p>		
Corrective Action #2	Oral clarification has been provided to the DOE.		
DOE Assessment #2	<p>PoA-DD V1.2</p> <p>5. Not ok. The application of national data is deemed reasonable and plausible and in line with §13 of AMS-I,C. version 18 which states “[...] reliable local or national data shall be used. IPCC default values shall be used only when country or project specific data are not available or demonstrably difficult to obtain”. The national data is issued by host country DNA they and host country DNA data is based in 2006 IPCC Guideline values. Therefore the data is considered reliable. However it</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input checked="" type="checkbox"/> real case CPA-DD
Finding	PoA-E9	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>has been identified that the value stated for the CO₂ emission factor for raw coal 87,300 tCO₂/TJ is inconsistent with related source</p> <p>7. Not ok. As the methodology does not provide an approach for calculation of total emission reductions of numerous small scale digesters in different climate regions, e.g. different MAT, this is conducted via fraction of manure handled is understood as following:</p> <p>Only one type of animal, pigs, is covered under this PoA.</p> $MS\%_{BL,j} = \frac{N_{LT,i} \cdot N_{HH,i}}{\sum_{j=1}^i N_{LT,j} \cdot N_{HH,j}} = \frac{\text{Regional fraction of manure handled}}{\text{total fraction of manure handled}}$ <p>With N_{HH,i} the number of households in the region.</p> <p>Regions are defined according to climate region; one region has one MAT and one MCF. Therefore “manure management system” is redefined as “manure handled in the region” as all manure management systems under the PoA are identical (open pit) and to address the circumstances of the PoA. DOE has rechecked and simulated the approach based on methodology and PoA-DD and confirms that approach leads to correct ER result. However the description for the parameter MS%_{BL,j} should be revised and specified to transparently explain the approach applied.</p> <p>15. Description FC_{i,j,y}, below equation 2: Clarification requested w.r.t. following sentence “The baseline annual coal consumption is named”</p>		
Corrective Action #3	<p>5. The typos (87,000 instead of 87.300) have been corrected.</p> <p>7. The description of MS%_{BL,j} has been updated to:</p> <p>Fraction of manure handled in baseline animal manure management system j. As the index j is covered the different climate conditions of the cities, this fraction reflects the share of animals in a climatic region to the total number of animals.</p> <p>15. The misleading sentence has been removed.</p>		
DOE Assessment #3	<p>PoA-DD V1.3</p> <p>5. Ok. The value has been corrected and is now consistent with the stated source.</p> <p>7. Ok. Further specification has been provided.</p> <p>15. Ok. Related sentence is deleted.</p> <p>16. However FC_{BL,y} and FC_{PE,y} are not referring to a sampling plan as required by EB 65, Annex 2, §6. Furthermore, these parameters mention a confidence/precision of 95/10, while the submitted sampling plan only mentions 90/10.</p>		
Corrective Action #4	<p>16. PDD has been updated accordingly.</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input checked="" type="checkbox"/> real case CPA-DD
Finding	PoA-E9	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
DOE Assessment #4	<p>16. Description in PDD v1.5 has been updated in DDs to be updated to: "Currently, the <i>Standard For Sampling And Surveys For CDM Project Activities And Programme Of Activities, version 02</i> requires a level of confidence of 95% and a maximum error of 10%. Methodology AMS III.R has the same requirements of 90/10. Therefore, the study shall at least meet a level of accuracy of 95/10."</p> <p>As all outstanding issues are closed this CAR is closed.</p>		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E10	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>Clarification is requested how the comprehensive baseline survey could include coal consumption after the installation of digesters and obtain data to calculate project emissions?</p>		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>The misleading wording of comprehensive baseline survey has been corrected.</p> <p>The survey carried out for each city considers two groups:</p> <ul style="list-style-type: none"> • One group comprises project households that are about to install the biogas digesters. • The second group comprises households of various construction years that installed the biogas digester already. All of these households have been selected to reflect the same type of household as the targeted project households. A similar area, same climatic condition and same habits of pig raising, previous pit storage of manure, food and heating habits, availability and price of fuel, etc. makes these households representative for the study. By determining the coal consumption of these households, applying the same levels of confidence and acceptable error, the expected coal consumption after the installation of the digesters can be determined. <p>Both groups are surveyed in the same study that is submitted to the DOE for review.</p>		
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	<p>Ok. The baseline survey covers the entire province and a group which already operate digester since years. Therefore the result is deemed appropriate to be fixed for the e.g. coal consumption after digester installation.</p> <p>Clarification has been provided CAR is closed.</p>		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E11	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
<p>Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i></p>	<p>The following issues w.r.t. section E.7.1 of PoA-DD have been identified:</p> <ol style="list-style-type: none"> 1. Clarification is requested why parameter $N_{k,total}$ the total number of HH with biogas digester located in city k, included in the CPA is monitored? 2. Clarification is requested whether number of households with active digesters refers to the number of systems operating. 3. The MP should be further specified w.r.t. how exactly the operation hours of a digester are obtained as the period between “discharge and restart” is unclear. 4. For all parameters the “value of data applied for the purpose of calculating emission reductions” refers to section B.5. However the PoA-DD does not provide such a section. Therefore clarification and revision is requested. 5. Clarification and revision is requested how the parameter MCF is obtained for those areas with a Mean Annual Temperature (MAT) below 10°C (e.g. Maerkang or Kangding see Table 10 Annex 3 of PoA-DD)? 6. Clarification is requested whether in all cases the “latest Sichuan Statistical Yearbook” is used to determine the MAT. 7. Clarification is requested why emission factor of fossil fuel type i (AMS I.C §48 No.2), NCV of fossil fuel type i (AMS I.C. §48 No.11) and carbon content of fossil fuel type i are not monitored. 8. For several parameters a description how the e.g. a table of values from which the corresponding “value of data applied” is chosen is provided (MAT and $MCF_{S,k}$) or reference to survey is provided. However the actual value applied should be provided and the method to obtain this value should be provided in “Description of measurement methods and procedures to be applied.”. 		
<p>Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i></p>	<p>The four points are answered as below:</p> <ol style="list-style-type: none"> 1. The questioned parameter has been deleted. 2. Yes, the number of households with active digesters refers to the number of systems operating. The wording has been changed accordingly. 3. According to the methodology, this figure shall be estimated. However, the purpose of this value is not described. Therefore, this value will be monitored, but not used in further calculations. To determine the annual running hours, the number and lengths of times when the digesters where not providing sufficient gas supply (during maintenance, cleaning, etc.) will be recorded and with this input, the final value can be calculated. 4. The tables are taken from the Clean Development Mechanism Small-Scale Programme of Activities Design Document Form (CDM-SSC-PoA-DD) Version 01 and have not been altered. 5. The MCF for cities with a mean annual temperature below 10 degrees is determined according to IPCC guideline. To clarify this issue, the following description has been added in the parameter list: This value will be determined annually for each city based on the mean annual temperature and the standard values provided in 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E11	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>IPCC 2006 Guidelines for National Greenhouse Gas Inventories, Volume 4, Chapter 10, Table 10A-7 and Table 10.17 (swine). While the temperature ranges listed there should cover most climate conditions, the guideline advises the PP to utilize the end-of-range (i.e., 10 or 28 degree) for areas that have extreme high or low annual average temperatures outside the 10 to 28 degree Celsius range. Therefore, the end-of-range will be applied for such cases.</p> <p>6. The data used will be officially published data, e.g. the Sichuan Statistical Yearbook. If this book should not be available in certain years or should it be renamed, etc. other officially published data will be used. The respective section in the PDD has been updated.</p> <p>7. The two values are included in the list of monitoring parameters (ref. parameters M08 and M09).</p> <p>8. In this referred document, the PoA-DD, no values are applied. Therefore, the actual value applied cannot be provided here. The values of temperature and MCF of the existing manure management systems differ between the different climatic regions (cities). The values will be applied and provided in the CPA-DDs.</p> <p>The following explanation has been added to the mean annual temperature (Parameter ID M04):</p> <p>City-specific date will be taken to guarantee a precise and suitable value to be applied for each manure management system.</p> <p>The following explanation has been added to the MCF (Parameter ID M05): The value applied will be chosen depending on the mean annual temperature (Parameter ID M04) in the specific climate region for each manure management system.</p>		
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>PoA-DD V1.1</p> <ol style="list-style-type: none"> Ok as the parameter has been deleted and updated emission reduction calculation does not require this parameter. Ok as corresponding description has been clarified to "Number of systems operating in each CPA". Ok. Clarification has been provided. The values required to determine the annual operation hours are obtained via sampling survey. The period of "not in operation" has been specified as the time during maintenance or cleaning of the digester. DOE can confirm via conducted interviews^{/IM03/} that the cleaning time is about 5 to 10 days depending on persons available and size of digester. Therefore the applied value of 351 days or 8,424 h (351 x 24) is deemed reasonable and plausible. Ok. DOE has checked the template and it confirms that the applied version of PoA-DD form is in compliance and consistent with the UNFCCC form. Ok. The Description of procedures applied for MCF has been updated accordingly. The end-of-range value is applied for extreme high or low annual average temperature areas. DOE has checked related IPCC Guideline and confirms that the way of determination is correctly applied consistent to the Guidance. Ok. Clarification has been provided in case the Sichuan Statistical 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E11	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>Yearbook is not available.</p> <p>7. Not Ok. NCV and emission factor of fossil fuel used, raw coal is provided in section E.7.1 and integrated in the monitoring plan. Carbon content is not provided as related data is EB41 Annex 11 Option B is used to determine COEF as necessary data is not available. However the values provided for NCV and emission factor for raw coal do not fit with the provided unit and are inconsistent with provided source. Therefore clarification requested. Finally the Description for parameter $EF_{CO_2,i,y}$ should be clarified and is inconsistent with EB41 Annex 11. Besides the QA/QC procedures should be updated in accordance to EB41 Annex 11.</p> <p>8. Ok. Related value for MAT and MCF are provided in Annex 3 Section 1 and Section 2.</p>		
Corrective Action #2	<p>7. The typos have been removed. Furthermore, EB41, Annex 11 does not provide a description of the QA/QC procedures of the parameter $EF_{CO_2,i,j}$. However, the description the QA/QC procedures of the parameter NCV have been updated, since they were inconsistent with EB41, Annex 11.</p>		
DOE Assessment #2	<p>PoA-DD V1.3</p> <p>7. Ok. The value applied for NCV and $EF_{CO_2,i,y}$ of raw coal correspond now with the unit and is consistent with the source.</p> <p>CAR is closed.</p>		
Conclusion <i>Tick the appropriate checkbox</i>	<p><input type="checkbox"/> To be checked during the first periodic verification</p> <p><input checked="" type="checkbox"/> Appropriate action was taken</p> <p><input checked="" type="checkbox"/> Project documentation was corrected correspondingly</p> <p><input type="checkbox"/> Additional action should be taken</p> <p><input checked="" type="checkbox"/> The project complies with the requirements</p>		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E12	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>The monitoring plan should be specified w.r.t. quality assurance and control measures and emergency preparedness. Besides which data has to be monitored, how is it obtained and if applicable which measurement equipment is involved. Furthermore the monitoring plan is missing information how it is ensured that all the methane collected by the recovery system is destroyed as per AMS III.R §4 (b).</p>		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>The monitoring plan has been updated to include the following descriptions:</p> <p>4. Data Management and Quality Control.</p> <p>The tentative system of data management and quality control is described below. As the system is improved constantly, improvements to increase the data accuracy might be implemented. In such case, all improvements will be documented and clearly described in all subsequent documents such as CPA-DDs and Monitoring Reports and provided to all involved stakeholders.</p> <p>a) Step 1: Supervisor Check</p> <p>When the monitoring data is collected, the supervisor of the county needs to review all questionnaires collected from each interviewer. Data on the questionnaires need to be</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E12	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
		<p>subject to five kinds of checks: range checks (outlier data), checks against reference data, skip checks, consistency checks and typographic checks.</p> <p>b) Step 2: Data Entry</p> <p>A data entry program should be used with suspect range and logical consistency triggers. One simple solution is to set up a spreadsheet data entry template with validity check triggers.</p> <p>c) Step 3: Data Check Algorithms</p> <p>A project data management software will check for inconsistencies, missing values, identification numbers, double data entry. One simple solution is to use sort and filter function of spreadsheet.</p> <p>d) Step 4: Analytical Checks:</p> <p>By basic descriptive statistics, the outliers can be easily figured out. Further statistical analysis can work out more characteristics of the data by professional analysis tools.</p> <p>5. Data Archives</p> <p>The Chinese Academy of Agricultural Engineering will collect electronic data from the local Rural Energy Offices. The data will be structured and forwarded to the C/ME.</p> <p>Together with the hard copies that will be collected by the SREO and forwarded to the C/ME, all data and documents will be archived by the C/ME and provided to the verifying DOE on demand.</p> <p>All data and documents will be archived by the C/ME at two different locations to avoid data loss and allow a data restore in the unlikely event of a data loss. All data will be stored until at least two years after the CPA crediting period is finished.</p> <p>Furthermore, information on how it is ensured that all methane collected by the recovery system is destroyed is not part of the monitoring requirements as per AMS-III.R. The methodology requires that "...measures shall be used (e.g. combusted or burnt in a biogas burner for cooking needs)...". As the stove is essential part of the household biogas digester system, all systems approved under the national subsidy scheme are delivered including at least one biogas stove. Therefore, all systems use the required measures. Further monitoring is not required.</p>	
<p>DOE Assessment #1</p> <p><i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>PoA-DD V1.1:</p> <p>The Monitoring Plan was updated w.r.t. QA/QC procedures and emergency preparedness. However the description as provided in corrective action above is not consistent with PoA-DD, e.g. title data management appears twice in the PoA-DD whereas the corrective action provides for point 5 the title data archives. Clarification and unification is requested. The applied quality procedures are deemed sufficient to ensure that the emission reductions from the PoA-DD/CPA can be reported and verified.</p> <p>Due to the nature of the measures to be installed by the PoA no measurement equipment is demanded to acquire monitoring data. The</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E12	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>related data is obtained via a sampling survey or from public available sources or literature. The DOE has checked the Monitoring Sampling Plan and considers the same as complete and sufficient based on their sectoral knowledge.</p> <p>Furthermore several eligibility criteria have been established which ensure that combustion equipment, biogas stove, is installed to destroy the produced methane, e.g. criterion 4.5, 5.1, 6.5 and 7. Therefore this point is deemed ok.</p>		
Corrective Action #2	A mistake occurred in the header of the respective section of the PoA-DD. It has been corrected and unified with the finding list now.		
DOE Assessment #2	Ok. Version 1.2 of PoA-DD has been updated accordingly. Related section has been deleted and PoA-DD is consistent with corrective action. Therefore this CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E13	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>In section E.7.2 of the PoA-DD, monitoring sampling study has used incorrect formula for proportional sampling rather than mean value sampling, please correct the formula as per UNFCCC Sampling Guidelines references.</p> <p>Besides, mean value sampling requires a pilot sample to define expected mean value and standard deviation, please clarify the information needed. Furthermore, it has not transparently describe the sampling methods for baseline survey and project monitoring as well as how DOE shall verify the emission reductions using sampling method, as well as, in case the expected mean value/proportion is not achieved, what procedures shall follow to discount or compensate the emission reductions. Further clarification is necessary.</p>		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>The formula in section E.7.2 has been replaced with a comprehensive description provided in the monitoring sampling plan, provided to the DOE. The questions regarding the statistical procedures and how the required statistical quality of 90/10 is achieved, are described in detail in this document.</p> <p>The question on how the DOE shall verify the emission reductions using sampling methods (which is already subject of section A.4.4) cannot be answered by the project developer at present. Referring to the procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities (EB55, Annex 38), paragraph 6(k), the C/ME opts for a sampling approach of CPA verification. As – in footnote 2 of this document – a guideline for a sampling verification approach will be developed by the CDM EB, but is not available at the time of PDD writing, a procedure that complies with the latest available guideline will be elaborated and provided to the DOE prior to the verification. If no applicable advice by the EB is available at the time of verification, no sampling approach will be applied and all CPA shall be verified.</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E13	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	The related section in the monitoring plan has been deleted and a comprehensive Monitoring Sampling has been provided to the DOE. CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E14	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	<p>The following issues w.r.t. provided survey spreadsheets have been identified:</p> <ol style="list-style-type: none"> 1. Clarification is requested as the data provided in both excel spreadsheets is for Yibin City only but section A.4.4.1 states that "The baseline emission shall be defined during a comprehensive baseline survey within the PoA boundary" and the PoA boundary is Sichuan Province. 2. For the Yibin baseline survey the following issues have been identified: <ol style="list-style-type: none"> a) Clarification and specification for the following parameters is requested: Population (of household members or swines?), the meaning of the value below the stated months, annual average (of what?) and coal content (is this referring to carbon content and how is this obtained (evidence))? Besides several parameters should be updated w.r.t. corresponding unit e.g. coal content per brick, annual honeycomb pcs per which time period? b) Besides the following parameters are not calculated but inserted, the annual average and the annual coal consumption. There revision requested. c) Clarification is requested as for several names more than one village name is indicated. d) For clear and transparent assessment and recalculation the corresponding parameter as per PoA-DD should be also mentioned in related headline. Besides the result and final value used for emission reductions calculation should be included. 3. The Excel spreadsheets should be provided in English language. 4. Furthermore the following issues have been identified during onsite visit: <ol style="list-style-type: none"> a) Several names are written wrong b) The number of swine population was inconsistent with data as per interview. c) The number of person in the household was inconsistent between spreadsheet and onsite assessment. d) The mean annual operation hours for the digesters is not reasonable as the result of the conducted interviews shows higher values for downtime that 5 days a year. 		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	<p>The following changes have been made:</p> <ol style="list-style-type: none"> 1. Section A.4.4.1 has been changed towards: The baseline emission shall be defined during a comprehensive 		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E14	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>baseline survey within the PoA boundary.</p> <p>The data provided to the DOE during the validation was the study covering Yibin city area. As the first CPA is located in this city, the respective study was carried out prior to the validation of the PoA. Hence the provided survey is only valid for the first CPA.</p> <p>The baseline data for the remaining cities will be determined prior to the inclusion of further CPAs. These surveys will then comprise all regions that will be covered by the following CPAs.</p> <p>2. Issues of the submitted database:</p> <p>a. The following clarifications are given and have been incorporated in the tables:</p> <ul style="list-style-type: none"> i. The word population refers to people. To avoid misunderstandings, the wording has been changed to the simplified "Household members". ii. The meaning of the figures below the months is the number of pigs in the stables. As these figures can change throughout the year (less pigs after public holidays or important festivals), the value has been determined as an annual average of the twelve monthly figures. iii. The column annual average is explained with the previous clarification. iv. The column "coal content per brick" is not referring to the carbon content, but the coal content per brick in its very simple meaning. To form the bricks, 30% of ash or sand is added to the raw coal. As this value doesn't change, it has been shifted from the data tables to the sheet "Basic Assumptions". v. An update of the parameters with respect to their units does not seem feasible, as the units are already correct. The carbon content of the bricks is 70% and therefore does not have a unit and the annual honeycomb consumption refers to the time period of one year. <p>b. The tables have been corrected and the formulae are now included.</p> <p>c. The rural areas of Yibin comprise hilly terrain and widely distributed villages and households. Most households in the database are not part of connected settlements, but are spread in remote locations, partly in isolated high valleys. While most households can be accounted to distinct villages, some are too remote for a clear definition of their village belonging. For such households, the names of the nearest villages are listed.</p> <p>3. The attached databases contain English headings Chinese and English names.</p> <p>4. Issues identified during the onsite visit:</p> <p>a. The names of several hundred households have been inserted. For some households, mistakes happened resulting</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E14	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
		<p>in incorrect Chinese characters. However, for the mistakes identified during the onsite visit, the pronunciation of the incorrect and the correct characters are identical. As usually several Chinese characters do have the same pronunciation. As the electronic typing of characters is based on the pronunciation (Hanyu Pinyin), the correct character has to be chosen after the pronunciation is entered using Greek letters. This choice was where the identified mistakes happened. As the future tables will be provided in English, this is unlikely to happen again.</p> <p>b. The survey was conducted in November and December 2010, 1-2 months prior to the onsite visit. For example, especially prior to the Chinese spring festival in the Chinese lunar calendar (usually between late January and Early March in the Gregorian calendar), pigs are killed to prepare the meat for the festival. Therefore, the number of pigs can change drastically. To account for these fluctuations, the number of pigs is calculated as an average of twelve monthly figures.</p> <p>c. The interviewed lady that gave a figure of persons living in her households told the auditor and the present staff of Oasis and the SREO that her husband died two weeks prior to the onsite visit. Considering the high numbers of interviewed households, such kind of deviations are not unlikely to occur.</p> <p>However, the survey was organized with the purpose to ensure the statistical significance of the sample. By choosing a high number of sampled households, changes that might occur in single households will not influence the overall result of the survey.</p> <p>d. The annual operation hours are not part of the data tables. This finding seems to refer to the ex-ante assumption in the PDD. The assumption is changed towards an annual downtime of 2 weeks.</p> <p>5. The submitted database of households shows a few digesters with a digester serial number that includes the number 2009. This is due to a delayed installation of digesters that's subsidy was financed with funds allocated already in 2009. However, the final approval was granted by the local government in late 2010. The announcement of the construction approval was made on October, 28th, 2010, as can be seen on the announcement of the Yibin Rural Energy Office and the official publication in Tongshan village was made on November, 3rd, 2010, as can be seen from the photographs of the public notice. Therefore, the final approval and the construction start of these digesters were after the uploading of the project documents to the Global Stakeholder Consultation on 24th of October 2010.</p>	
<p>DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>1. Ok. Clarification has been provided as the description in section A.4.4.1. was specified as following "The baseline emission shall be defined during a comprehensive baseline survey".</p> <p>2. An updated spreadsheet has been provided: a.Ok. DOE has checked the updated spreadsheet and confirms</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E14	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	<p>that related clarifications have been conducted.</p> <p>b.Ok. Related values are now calculated.</p> <p>c.Ok. Clarification has been provided. For names with no clear village determination the location is identified by naming the nearest villages this is deemed plausible and reasonable.</p> <p>d.Not ok. Response pending.</p> <p>3. Ok. An English spreadsheet has been provided. However the Chinese original names are kept and their English translation (Pinyin) is provided for clear and transparent identification.</p> <p>4. Updated spreadsheet has been provided:</p> <p>a.Ok. The related names have been corrected.</p> <p>b.Ok. Clarification is provided. DOE confirms by host country competence that pigs are killed especially prior to Chinese spring festival. This is also confirmed by conducted interviews with farmer ^{/IM03/}. Based on this DOE can also confirm that the average number were correct. Clear mistakes have been corrected.</p> <p>c. Not ok. Please clarify whether the difference has been applied to the updated spreadsheet?</p> <p>d.Ok. The corresponding parameter in section E.7.1 has been updated accordingly from 360 days down to 351 days based on interviews results by DOE.</p>		
Corrective Action #2	<p>2.</p> <p>d. The parameter numbers for the pig number and coal consumption have been included in the headlines in the updated version submitted with the second round of responses.</p> <p>4.</p> <p>c. Since the number of persons living in the households is not relevant for the CDM, the calculation of emission reductions or any other purposes, the difference has not been applied to the updated spreadsheet. In the future versions of the study that will be applied for the upcoming CPAs, this value will not be included.</p>		
DOE Assessment #2	<p>2. d. Not ok. Inconsistency between Parameter denomination between spreadsheet and PoA-DD has been identified e.g. average swine population. Besides several inconsistencies between the description of parameter in the spreadsheet and the PoA-DD have been identified e.g. total coal consumption in spreadsheet and average annual coal consumption in PoA-DD. Clarification and unification requested.</p> <p>4. c. Ok. DOE confirms Number of persons are not relevant for ER calculation but the number of pigs per household.</p> <p>5. Not ok. Source for the raw coal content in Honeycomb coal is missing and should be provided.</p>		
Corrective Action #3	<p>5. The respective parameter column has been renamed to Annual coal consumption and a new description (Average annual coal consumption has been added at the last row, where the average</p>		



Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-E14	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR
	of all households is calculated.		
	6. The requested evidence is provided with this updated response to the finding list.		
DOE Assessment #3	2. d. Ok. the inconsistency has been clarified by adding the parameter ID. The IDs correspond with the PoA-DD. Clear identification is now ensured.		
	5. Ok. Related supporting document issued by the Yibin Leading Group of Coal marketing Order Rectification has been provided according to which the honeycomb coal consists of 15% water, 15% soil, 70% coal.		
	As all outstanding issues have been solved this CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Related DDs	<input checked="" type="checkbox"/> PoA-DD	<input type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	PoA-An1	<input type="checkbox"/> CAR	<input checked="" type="checkbox"/> CL <input type="checkbox"/> FAR
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Clarification and unification is requested whether the name of the C/ME and project participant as per section A.3 or Annex 1 of the PoA-DD is not fully correct as the name in section A.3 contains a comma between Co. and Ltd. whereas in Annex 1 this is not mentioned and in section A.3 the name contains "and" whereas in Annex 1 this is not written but the symbol "&" is used.		
Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	The name has been corrected.		
DOE Assessment #1 <i>The assessment shall encompass all open issues in annex A-1. In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i>	PoA-DD V1.1: The names of the C/ME Chengdu Oasis Science & Technology Co., Ltd. has been updated accordingly and is now 100% consistent between section A.3 and Annex I. However the name for the Annex I participant is inconsistent as the name in section A.3 lacks a space between UPM and Umwelt as per Annex I. Hence revision requested.		
Corrective Action #2	Corrected.		
DOE Assessment #2	PoA-DD V1.2: Ok. The names have been unified and are now mutually consistent. Therefore this CAR is closed.		
Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> To be checked during the first periodic verification <input checked="" type="checkbox"/> Appropriate action was taken <input checked="" type="checkbox"/> Project documentation was corrected correspondingly <input type="checkbox"/> Additional action should be taken <input checked="" type="checkbox"/> The project complies with the requirements		

Related POA-DDs	<input checked="" type="checkbox"/> PoA-DD	<input checked="" type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD
Finding	gCPA-1	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR

Related POA-DDs	<input checked="" type="checkbox"/> PoA-DD	<input checked="" type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD																																																				
Finding	gCPA-1	<input checked="" type="checkbox"/> CAR	<input type="checkbox"/> CL <input type="checkbox"/> FAR																																																				
Description of finding <i>Describe the finding in unambiguous style; address the context (e.g. section)</i>	Please update the generic CPA-DD according to the finalized PoA-DD, especially keep the information consistent between the following sections:																																																						
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Corrective Action #1 <i>This section shall be filled by the PP. It shall address the corrective action taken in details.</i>	Revision is made to the generic CPA-DD to keep consistent with the finalized PoA-DD.																																																						



Related POA-DDs	<input checked="" type="checkbox"/> PoA-DD	<input checked="" type="checkbox"/> generic CPA-DD	<input type="checkbox"/> real case CPA-DD																																																																																
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In case of non-closure, additional corrective action and DOE assessments (#2, #3, etc.) shall be added.</i></p>	<p>The revised generic CPA-DD has been crosschecked with the finalized PoA-DD and the conclusion is described in the table below:</p> <table border="1"> <thead> <tr> <th>Generic CPA-DD</th> <th>Finalized PoA-DD</th> <th>Consistent and Appropriate</th> </tr> </thead> <tbody> <tr><td>A.1.</td><td>A.1</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>A.2.</td><td>A.2. and A.4.2.1.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>A.3.</td><td>A.3.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>A.4.1.1.</td><td>A.4.1.1.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>A.4.1.2</td><td>A.4.1.2.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>A.4.2.1.</td><td>*Not prior to GSP of PoA-DD</td><td><input checked="" type="checkbox"/> Appropriate</td></tr> <tr><td>A.4.2.2.</td><td>-</td><td><input checked="" type="checkbox"/> Appropriate</td></tr> <tr><td>A.4.3.1.</td><td>B.1.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>A.4.3.2.</td><td>B.2.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>A.4.4.</td><td>-</td><td><input checked="" type="checkbox"/> Appropriate</td></tr> <tr><td>A.4.5.</td><td>A.4.5.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>A.4.6.</td><td rowspan="2">A.4.4. and A.4.4.1.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>A.4.7.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>B.1.</td><td>A.1</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>B.2.</td><td>A.4.2.2.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>B.3.</td><td>A.4.3, E.5, E.5.1 and E.5.2.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>B.4.</td><td>E.3.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>B.5.</td><td>E.6.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>B.5.1.</td><td>E.6.3.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>B.5.2.</td><td>E.6.1. and E.6.2.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>B.5.3.</td><td>-</td><td><input checked="" type="checkbox"/> Appropriate</td></tr> <tr><td>B.6.</td><td>E.1 and E.2.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>B.6.1.</td><td>E.7, E.7.1, E.7.2 and A.4.4.2.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>C.1. to C.3</td><td>C.1. to C.3</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>D.1. to D.4.</td><td>D.1 to D.4.</td><td><input checked="" type="checkbox"/> Consistent</td></tr> <tr><td>Annex 1 to Annex 4</td><td>Annex 1 to Annex 4</td><td><input checked="" type="checkbox"/> Consistent and Appropriate</td></tr> </tbody> </table> <p>Thus finding gCPA-1 is successfully closed, all necessary information consistent between the finalized POA-DD and the Generic CPA-DD (Generic CPA-DD Checklist 2).</p>			Generic CPA-DD	Finalized PoA-DD	Consistent and Appropriate	A.1.	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5 VALIDATION ASSESSMENT SUMMARY

5.1 General Description of the PoA

5.1.1 Participation

LOA(s)

The precise title of this PoA is: Sichuan Rural Poor-Household Biogas Development Programme.

Host country Approval for this PoA has been issued on 2011-12-06 vide official document 2011[2720] by National Development and Reform Commission, which is confirmed as P.R. of China's DNA. The PoA complies with the permission requirements and assists the host country in achieving sustainable development.

Annex-I country Approval for this PoA has been issued on 2012-01-19 vide official document EA/UPM/01/2012 by Environmental Agency, which is confirmed as United Kingdom's DNA..

Project Participants and CME

The PoA CME (Coordinating and Managing Entity) is Chengdu Oasis Science & Technology Co., Ltd., which is authorized as China's Project Participant. Another project participant is UPM Umwelt-Projekt-Management GmbH. Information regarding project participants is confirmed as consistent in the PoA-DD and LOAs.

However CAR PoA-A6, CAR PoA-A7, CAR PoA-A8 and CAR PoA-An1 have been raised and successfully closed.

5.1.2 Contribution to Sustainable Development

The host country China DNA approves that the PoA complies with the permission requirements provided for in the measures for operation and management of CDM project and assists the host country in achieving sustainable development.

5.1.3 PDDs editorial Aspects

The PoA-DD is using CDM-SSC-PoA-DD template version 01 and generic CPA-DD is using CDM-SSC-CPA template version 01. They are in compliance with the latest PoA-DD and CPA-DD templates and guidelines.

Nevertheless, CAR PoA-A1 has been raised and successfully closed.

5.1.4 Technology to be employed

The description of the PoA is complete, accurate and in compliance with the PoA-DD and CPA-DD templates and guidelines. The PoA will install small biogas digesters,

fed with the manure from household pig husbandry, which produces biogas mainly consisting of methane which is used for cooking via cook stove. The PoA is designed to enable the poor population of the rural areas in Sichuan to participate in the existing biogas subsidy programme provided by the Sichuan Rural Energy Office. The approach adopted to achieve this is twofold

- a) **Financial support:** The PoA is offering an additional regular income generated by carbon credits.
- b) **Technical support:** The proposed PoA will provide free technical service during start up and operation of the digesters.

Prior to the installation of the biogas digesters the manure from the pig husbandry is stored in open pits deeper than 1m. Therefore the manure was stored mainly under anaerobic conditions and generated GHG is emitted into the atmosphere. Further in the baseline situation the farmers/households used coal (raw coal or honeycomb coal) as fuel for cooking. By the PoA the biogas (mainly consisting of CH₄) is collected and destroyed. Finally additional GHG emissions (CO₂) are reduced as the utilization of biogas substitutes the use of fossil fuel coal for cooking.

Besides, as the construction and installation of the technology employed has to follow national standards and regulations it is confirmed as environmentally safe and sound.

However CAR PoA-A2, CAR PoA-A7 and CAR PoA-A9 have been raised and successfully closed.

5.1.5 Small Scale Projects

The value of annual emission reductions of every CPA proposed under this PoA is no more than 60 kt CO₂ equivalent annually for the type III component and the rated capacity of the installed equipment (cook stove) at each household is 2.955 kW and therefore below the type I threshold of 15 MW. The first proposed CPA is estimated to have 2,278 tCO_{2e} emission reductions annually, which is further confirmed as less than 60 kt CO₂ equivalent annually; therefore, the proposed project is a small scale PoA. Besides the CPAs will be designed in a way that the number of HH which take part within a CPA is below a certain number to ensure that both thresholds are met. Besides eligibility criteria are established which demand even lower threshold limits than those to be applicable as a small scale PoA. These are criteria w.r.t. demonstration of additionality, eligibility criteria 12.1 – 12.3 and 13.1 – 13.3. As these thresholds are 20 ktCO_{2e} per year w.r.t. type III and 5 MW_{el} or 15MW_{th}. As those criteria are met DOE can confirm that the PoA is a small scale PoA. Besides by this it is ensured that the threshold limits will not be exceeded in any year of the crediting period.

The DOE has also checked and confirms that the CME has substantiated that the CPA is not a de-bundled component of large scale project through application of applicable EB 54, Annex 13 - "Guidelines on Assessment of Debundling for SSC Project Activities" (version 03).

However CAR PoA-A5 has been raised and successfully closed.

5.2 PoA Baseline, Additionality and Monitoring Plan

5.2.1 Application of the Methodology

By consultation of the UNFCCC website, it is confirmed that the Approved methodologies for small-scale CDM project:

AMS-I.C - *Thermal energy production with or without electricity* (version 19);

AMS-III.R– *Methane recovery in agricultural activities at household/small farm level* (version 02).

are applicable to the proposed PoA (AMS-III.R since its first approval in EB35, October 2007 and AMS-I.C. since EB33, July 2007).

The combination of the methodologies AMS-III.R and AMS-I.C has been approved for the use within PoAs by the CDM Executive Board (EB) in its 53th meeting.

The versions of both CDM Methodologies approved by EB are valid during submission for registration.

As per the applied methodology AMS.III.R (version 18), the approved methodology for small-scale CDM project AMS.III.D.: *Methane recovery in animal manure management systems* (version 17) shall be used to calculate baseline and project emissions. To calculate emissions from fossil fuel combustion, the *Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion* (version 02) is used.

The methodology and tools are available at:

<http://cdm.unfccc.int/methodologies/SSCmethodologies/approved>

Furthermore, all applicability conditions of the applied methodology have been met and the PoA design is in line with all requirements and stipulations mentioned in all sections of the applied methodology. Besides, the PoA design is not expected to result in significant emissions, related both to project and leakage, other than those listed in the methodology.

However CAR PoA-E1, CAR PoA-E2 and CAR PoA-E3 have been raised and successfully closed.

5.2.2 PoA Boundary and CPA Boundary

The boundaries (geographically and related to GHG sources / sinks) are correctly given in section A.4.1.2 of the PoA-DD. The geographical boundary of this PoA is Sichuan Province and the physical boundary of a typical measure under this PoA is a rural household including its pig barns, manure storage, digester, biogas stove and digestive application.

As per AMS.I.C (version 19) the boundary of the CPA of this PoA is

- (a) All plants generating power and/or heat located at the project site, whether fired with biomass, fossil fuels or a combination of both;
- (b) All power plants connected physically to the electricity system (grid) that the project plant is connected to;
- (c) Industrial, commercial or residential facility, or facilities, consuming energy generated by the system and the processes or equipment affected by the project activity;
- (d) The processing plant of biomass residues, for project activities using solid biomass fuel (e.g. briquette), unless all associated emissions are accounted for as leakage emissions;
- (e) The transportation itineraries, if the biomass is transported over distances greater than 200 kilometres, unless all associated emissions are accounted for as leakage emissions;

And additionally as per AMS.III.R (version 2) the project boundary is defined as:

- The project boundary is the physical, geographical site of the methane recovery and combustion systems.

The information has been also correctly given in section A.4.1.2 of the real case CPA-DD.

The physical delineation of the CPA under the PoA and the description of the emission sources and GHGs that are included in the CPA boundary are appropriate for the purpose of calculating project and baseline emissions for each CPA.

The methodology AMS.I.C indicates CO₂ and AMS:III.R CH₄ are the GHG sources to be included in the boundary; the DOE confirms that the justification by the PP is reasonable and evidenced. Besides, there are no other sources which are impacted by the project and not addressed by the applied methodology.

However CAR PoA-A8 has been raised and successfully closed.

5.2.3 Baseline Identification

The procedure to identify the most plausible baseline scenario derived from the applied methodology has been applied correctly and is transparently and sufficiently documented in the PoA-DD.

The baseline is predefined in the corresponding methodologies. The baseline scenario is therefore correctly defined as:

As per AMS.I.C

13. For renewable energy technologies that displace technologies using fossil fuels, the simplified baseline is the fuel consumption of the technologies that

would have been used in the absence of the project activity times an emission factor for the fossil fuel displaced. For calculating the emission factor, reliable local or national data shall be used. IPCC default values shall be used only when country or project specific data are not available or demonstrably difficult to obtain.

As per AMS.III.R

9. The baseline scenario is the situation where, in the absence of the project activity, biomass and other organic matter are left to decay anaerobically within the project boundary and methane is emitted to the atmosphere. Baseline emissions (BE_y) are calculated ex ante using the amount of the waste or raw material that would decay anaerobically in the absence of the project activity, with the most recent IPCC tier 2 approach (please refer to the chapter “Emissions from Livestock and Manure Management” under the volume “Agriculture, Forestry and other Land use” of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories). Country/regional-specific values shall be used if available. The option in paragraph 9 (a) and relevant formulae shown in paragraph 10 of AMS-III.D “Methane recovery in animal manure management systems” shall be used to calculate baseline emissions.

DOE confirms that all plausible alternatives have been identified and the non-plausible alternatives have been properly justified and excluded. It has been assessed that the identified baseline scenario is plausible, conservative and reasonably represents what would occur in the absence of the proposed PoA, and the approved methodology used is applicable to the identified baseline scenario. For a detail assessment of the baseline, please refer to Annex 1 and 2.

To ensure that the CPA complies with the baselines as described above eligibility criteria 6.2 and 6.3 are established.

However CAR PoA-E5 has been raised and successfully closed.

5.2.4 Calculation of GHG Emission Reductions

The PoA-DD applies steps and equations to calculate project emissions, baseline emissions, leakage and emission reductions as per the requirements of the applied methodology.

For the calculation of the GHG emission reductions the correct equations have been used reflecting the methodological choices.

Following equations are used for the calculation of the emission reductions:

The emission reduction is calculated as baseline emission deducted by project emission and leakage.

Baseline Emissions:

$$BE_{CH_4,y} = GWP_{CH_4} \cdot D_{CH_4} \cdot UF_b \cdot \sum_{j,LT} MCF_j \cdot B_{0,LT} \cdot N_{LT,y} \cdot VS_{LT,y} \cdot MS\%_{BI,j}$$

Where:

$BE_{CH_4,y}$	Baseline methane emissions in year y (tCO ₂ e)
GWP_{CH_4}	Global Warming Potential for CH ₄ (21)
D_{CH_4}	CH ₄ density (0.00067 t/m ³ at room temperature (20 °C) and 1 atm pressure)
UF_b	Model correction factor to account for model uncertainties (0.94)
j	Index for animal manure management system. As – according to the applicability criteria - all households use pits to store the animal manure, this index is used for the different climate conditions on a city basis.
LT	Index for all types of livestock
MCF_j	Annual methane conversion factor (MCF) for the baseline animal manure management system j. To pay respect to different annual mean temperatures in the covered region, the pits in different cities are considered different manure management systems with different MCF values.
$B_{0,LT}$	Maximum methane producing capacity for the volatile solid generated for animal type LT (m ³ CH ₄ (kgdm) ⁻¹)
$N_{LT,y}$	Annual average number of animals of type LT in year y (numbers). The number of animals will be determined based on city averages of the number of pigs per households and the number of households in each city (=climatic region).
$VS_{LT,y}$	Volatile solids for livestock LT entering the animal manure management system in year y (on a dry matter weight basis, kg dm/animal/year)
$MS\%_{BI,j}$	Fraction of manure handled in baseline animal manure management system j. As the index j is covered the different climate conditions of the cities, this fraction reflects the share of animals in a climatic region to the total number of animals.

$$BE_{CO_2,y} = \sum_t FC_{BE,i,j,y} \cdot COEF_{i,y}$$

Where:

$BE_{CO_2,y}$	Baseline carbon dioxide emissions from fossil fuel combustion in year y (tCO ₂ e)
$FC_{i,j,y}$	Quantity of fuel type i combusted in process j during the year y (mass volume or volume unit/yr). For this project, only baseline emissions from domestic use coal are considered in the calculation of emission reductions. This is a conservative approach that results in i and j being reduced to 1 (i: coal is the only type of fuel; j: only domestic coal consumption is considered).
$COEF_{i,y}$	Is the CO ₂ emission coefficient of fuel type i in year y (tCO ₂ /mass or volume unit). This will be calculated using national data.

As the available data is not sufficient for option A, offered by the tool to calculate $COEF_{i,y}$, option B is chosen:

$$COEF_{i,y} = NCV_{i,y} \cdot EF_{CO_2,i,y}$$

The baseline emissions covered by methodology AMS I.C can be reduced to:

$$BE_{CO_2,y} = FC_{BE,y} \cdot NCV_{coal,y} \cdot EF_{CO_2,coal,y}$$

Where:

$BE_{CO_2,y}$	Baseline carbon dioxide emissions from fossil fuel combustion in year y (tCO ₂ e)
$FC_{BL,y}$	Quantity of coal combusted for domestic use in year y (mass volume or volume unit/yr).
$NCV_{coal,y}$	Is the CO ₂ emission coefficient of coal in year y (tCO ₂ /mass or volume unit).
$EF_{CO_2,coal,y}$	Is the weighted average CO ₂ emission factor of raw coal in year y (tCO ₂ /GJ). According to the national data, the emissions factor for raw coal is 87,300 tCO ₂ /TJ. This value reflects the lower value of the 95% confidence level of the values provided in the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and is therefore conservative.

Project Emissions:

AMS.III.R:

AMS-III.D, the first option (13 (a)) is chosen to calculate the project emissions. Following this paragraph, a physical leakage of 10% of the maximum methane producing potential of manure fed into the management systems implemented by the project activity is assumed.

$$PE_{CH_4,y} = 0.10 \cdot GWP_{CH_4} \cdot D_{CH_4} \cdot \sum_{LIT} B_{0,LT} \cdot N_{LT,y} \cdot VS_{LT,y} \cdot MS\%_{i,y}$$

AMS.I.C:

Similar to the baseline emissions from fossil fuel, the project emissions will be calculated:

$$PE_{CO_2,y} = \sum_i FC_{PE,y} \cdot COEF_{i,y}$$

Where:

$PE_{CO_2,y}$	Project carbon dioxide emissions from fossil fuel combustion in year y (tCO ₂ e)
$FC_{PE,y}$	Quantity of fuel type i combusted in process j during the year y (mass volume or volume unit/yr).
$COEF_{i,y}$	Is the CO ₂ emission coefficient of fuel type i in year y (tCO ₂ /mass or volume unit). This will be calculated using national data.

The possible project emissions from electricity or other sources that are listed in the methodology are not applicable, as no electricity consumption occurs and not other greenhouse gases are emitted by the project activity.

According to the explanations for the baseline emissions, this equation can be further developed to:

$$PE_{CO_2,y} = FC_{PE,y} \cdot NCV_{coal,y} \cdot EF_{CO_2,coal,y}$$

Where:

$PE_{CO_2,y}$	Baseline carbon dioxide emissions from fossil fuel combustion in year y (tCO ₂ e)
$FC_{PE,y}$	Quantity of coal combusted for domestic use in year y (mass volume or volume unit/yr).
$NCV_{coal,y}$	Is the CO ₂ emission coefficient of coal in year y (tCO ₂ /mass or volume unit).
$EF_{CO_2,coal,y}$	Is the weighted average CO ₂ emission factor of raw coal in year y (tCO ₂ /GJ). According to the national data, the emissions factor for raw coal is 87,300 tCO ₂ /TJ. This value reflects the lower value of the 95% confidence level of the values provided in the 2006 IPCC Guidelines for National

Greenhouse Gas Inventories and is therefore conservative.

Leakage emissions:

No leakage is considered as no equipment is transferred from or to another activity as well as no collection/processing/transportation of biomass residues from outside the project boundary to the project sites occur. This is confirmed by onsite visit.

Further leakage emission due to competitive use of biomass residue has been set to zero as the biomass residue, manure, under this PoA is not applied otherwise in the baseline. As under the baseline the digestive is applied as fertilizer for agriculture.

Emission Reduction:

The emission reduction due to reduced coal consumption based on AMS.I.C is calculated as:

$$ER_{CO_2,y} = BE_{CO_2,y} - PE_{CO_2,y} - Leakage$$

The emission reduction due to reduced coal consumption based on AMS.I.C is calculated as:

Finally, the combined emission reduction due to methane avoidance and reduced coal consumption can be calculated:

$$ER_y = ER_{CH_4,y} + ER_{CO_2,y}$$

The following parameters are ex-ante determined values:

- Average annual coal consumption before the installation of the digesters ($FC_{BL,y}$) as per Comprehensive baseline survey
- Average annual coal consumption after the installation of the digesters ($FC_{PE,y}$) as per Contrast group survey
- Daily volatile solid excreted per animal ($VS_{LT,y}$) 109.5 (0.3 x 365) kg dry matter animal⁻¹ year⁻¹ as per 2006 IPCC for Asian swine
- Maximum methane producing capacity for manure produced by livestock, of VS excreted ($B_{0,LT}$) 0.29 m³ CH₄ kg⁻¹ as per 2006 IPCC for Asian swine
- Global Warming Potential for CH₄ (GWP) 21 tCO₂e/tCH₄ as per 2006 IPCC
- Conversion factor of m³CH₄ to kilogram CH₄ (D_{CH_4}) 0.67 as per 2006 IPCC
- Model correction factor to account for model uncertainties (0.94) (UF_b) as per methodology AMS.III.D

For the data and parameters not to be monitored throughout the crediting period (i.e. they are determined only once and thus remain fixed throughout the crediting period), it is assessed that all data sources, assumptions and calculations are correct,

applicable to the project and contribute to a conservative estimate of the emission reductions. For the data and parameters subject to monitoring, it is confirmed that the ex-ante estimated values for the monitoring parameters are plausible, and the emission reduction estimates provided in the PoA-DD are reasonable and conservative.

However findings CAR PoA-E4, CAR PoA-E5, CAR PoA-E6, CAR PoA-E9, CAR PoA-E10 CAR PoA-E11 and CAR PoA-E14 w.r.t. the Emission Reduction calculation have been raised and successfully closed.

5.2.5 Additionality Determination

Prior Consideration of CDM in decision making

The first CPA starting date (2010-10-28) is defined as per CDM glossary of term, and is later than the commencement of validation of the PoA, i.e., the date on which the PoA-DD is first published for global stakeholder consultation (2010-10-28), thus as per paragraph 7(d) of PoA Procedures (version 04.1, EB55 Annex 38) and paragraph 2 of Guidelines on the Demonstration and Assessment of Prior Consideration of the CDM (EB49 Annex22), the DOE has determined that the CDM was seriously considered in the decision to implement the project activity.

Additionality justification as per methodology / methodological tools

The additionality was justified in accordance with the requirements derived from applied methodology, PoA Procedures, and Attachment A to Appendix B of the simplified modalities and procedures for small-scale CDM project activities: referred therein.

The additionality is based on the EB Annex Guidance for Microscale Projects.

As an individual system to be installed under this PoA reduces GHG emissions due to substitution of fossil fuel consumption as well as due to methane destruction the corresponding thresholds for Type I and Type III are to be followed. As per §8 of EB60 Annex 25 a project activity (CPA) with more than one component, each of the component has to meet the microscale threshold. Further the sum of the components of a project activity (CPA) belonging to the same type shall not exceed the limits for microscale project activities. The thresholds applicable under this PoA are therefore:

- For Type I: 5 MW_{el} equivalent to 15 MW_{th}
- For Type III: 20 ktCO₂e Emission Reduction.

The DOE has checked related Guidance EB60 Annex 25 and “General Guidelines to SSC CDM methodologies” and confirms that related thresholds are established correct.

PoA-DD section E.5.1 discusses and specifies the corresponding paragraphs of EB60 Annex 25. Further the PoA-DD under section A.4.2.2 and E.5.2 criteria are established which ensure that any CPA under this PoA will meet corresponding threshold limits. The criteria are also established in a way to address §8 c. of EB60 Annex 25.

The corresponding criteria as per PoA-DD section A.4.2.2 and related evidence examples are as following:

Nb.	Criterion	Description/rational	Evidence Example
12.	The CPA meets the additionality criteria relevant for Type I.		
12.1.	The total thermal capacity installed at all households of the CPA does not exceed 15 MW _{th} .	A test record of the typical biogas stoves will be provided as evidence during the inclusion. The number of households should not exceed the maximum capacity of 15 MW _{th} divided by the capacity of one stove.	<ul style="list-style-type: none"> • Test record of implemented stoves • CPA household list
12.2.	The thermal capacity of a single stove does not exceed 4,500 kW _{th} .	Requirement of the <i>Guidelines for demonstrating additionality of microscale project activities.</i>	<ul style="list-style-type: none"> • Test record of implemented stoves
12.3.	The users of the subsystems will be households.	Requirement of the <i>Guidelines for demonstrating additionality of microscale project activities.</i>	<ul style="list-style-type: none"> • CPA household list
13.	The CPA meets the criteria relevant for Type III.	Requirement of the <i>Guidelines for demonstrating additionality of microscale project activities.</i>	
13.1.	The total annual emission reduction from methane avoidance (type II activity) aimed by the CPA does not exceed 20 ktCO ₂ e in any year of the crediting period.	Requirement of the <i>Guidelines for demonstrating additionality of microscale project activities.</i>	<ul style="list-style-type: none"> • SSC-CPA-DD • Baseline survey
13.2.	The annual emission reduction from methane avoidance (type II activity) of one single household does not exceed 600 tCO ₂ e.	To emission reductions calculated using the formulas derived in Annex 3.3 will be compared to the limit of 600 tCO ₂ e.	<ul style="list-style-type: none"> • SSC-CPA-DD • Baseline survey
13.3.	The users of the subsystems will	Requirement of the <i>Guidelines for</i>	<ul style="list-style-type: none"> • CPA household list

	be households.	<i>demonstrating additionality of microscale project activities.</i>	
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According to this the DOE states that the additionality is demonstrated based on EB60 Annex 25. Corresponding thresholds are correctly stated and established. Further eligibility criteria are established to ensure that this microscale additionality thresholds are met as well as the additionality of is demonstrated on CPA level.

Based on the assessment above and as the DOE has checked EB 60 Annex 25 as well as the PoA-DD and deems the criteria as sufficient the way of demonstrating additionality is sufficiently introduced and established to ensure that each CPA under this PoA is additional and justified.

Summary

CDM was seriously considered by the CME before the starting of the project activity.

All the arguments and parameters in the PoA-DD are well evidenced. Related eligibility criteria are well established.

However CAR PoA-E7 and CAR PoA-E8 were raised and successfully closed.

5.2.6 Eligibility criteria

Section A.4.2.2. of the PoA-DD provides corresponding eligibility criteria established for the inclusion of a CPA under this PoA.

The DOE confirms that the eligibility criteria have been well established and include criteria w.r.t. the applicability of the related methodologies AMS.III.R and AMS.I.C, criteria 4.1 through 5.2. Further criteria 12.1, 12.2., 12.3, 13.1, 13.2 and 13.3 for the demonstration of additionality as well as criteria to ensure that CME has control over all data and approves each CPA, criterion 1., that any CPA lies within the geographical boundary of the PoA, criterion 2. And 6.1, criteria to avoid double counting, criteria 3.1, 3.2 and 3.3, further parameter w.r.t. the baseline, criteria 6.2 through 6.4 and 6.6, criteria w.r.t. de-bundling, criterion 7., that no ODA is involved, criterion 8., ensure consistent use of monitoring plan, criterion 9., as well as criteria to ensure that start date of any CPA is not prior to global stakeholder publication (28/10/2010) besides does not exceed the end date of the PoA and is evidenced by documentation, criteria 10.1 and 10.2 and 11. Further an eligibility criterion has been established to ensure that only low-income household are covered under this PoA in regard to a stakeholder comment raised, criterion 6.5. An eligibility criterion w.r.t. EB65 Annex 3 §14 (g) has not been further referenced as stakeholder consultation and EIA have been conducted on PoA-level and have not been demonstrated by each individual CPA.

For further assessment of all eligibility criteria see Annex 6. It can be therefore confirmed that established eligibility criteria cover at least the requirement as per EB65 Annex 3 § 14.

However CAR PoA-A10 has been raised and successfully closed.

5.2.7 Monitoring Methodology

The monitoring plan is in compliance with the applied monitoring methodology AMS.I.C (version 19) and AMS.III.R (version 2).

However CAR PoA-E1 has been raised and successfully closed.

5.2.8 Monitoring Plan

According to the applied methodology, all monitoring parameters required by the applied methodology contained in the monitoring plan. They are:

- The number of systems operating in each CPA (N_k)
- Mean annual operation hours of the digesters (t)
- Mean annual temperature in city k (T)
- Methane conversion factors for each manure management system S in climate region k ($MCF_{S,k}$)
- Annual average number of animals of type LT in year y ($N_{LT,y}$)
- Land application of digestate from biogas digesters to avoid anaerobic digestion (Proper sludge application ratio)
- Emission Factor of raw coal ($EF_{CO_2,i,y}$)
- Net Calorific Value of raw coal ($NCV_{i,y}$)

It has been confirmed that for all monitoring parameters, conservative approaches have been ensured to derive values to emission reduction calculations during monitoring period.

The monitoring plan can be implemented and all the monitoring arrangements are feasible within the PoA design.

Nevertheless, CAR PoA-E10, CAR PoA-E11, CAR PoA-E 12 and CAR PoA-E13 were raised and successfully closed.

All monitoring parameters for which no complete set of records is obtained are monitored according to a sampling plan. This sampling plan^{SP/} has been provided to the DOE for validation as a separate document. It consists of six sections covering the "Sampling Objectives", "Target Population", "Data to be collected", "Sample Method", "Sample Size" and "Procedures for Data Collection and Quality Control".

The validation team thoroughly examined the sampling plan with respect to its sampling design. This assessment especially focused on the ability of the proposed sampling plan to produce unbiased and reliable results, which satisfy EB 65, Annex2.

It included (but was not limited to) a cross-check of all applied formulae as well as a double-check of the corresponding numerical calculations. The sampling approach taken by PP was found to correspond to well established sampling methods as laid out e.g. in “Sampling Techniques” by W.G. Cochran. Furthermore, the validation team utilized the complete list of recommended evaluation criteria (EB 65, Annex 2, Appendix 5) to assess the proposed sampling plan.

The validation team found the sampling plan to be adequate to achieve 95/10 confidence/precision. The actual sample sizes will depend on the relevant programme parameters (e.g. number of installations) after the programme’s implementation. The sample size calculation could be reproduced in order to validate the preliminary sample sizes.

The chosen sampling approach is a two-stage simple random sampling covering administrative villages as primary sampling units (PSUs) and families as ultimate sampling units (USUs). The approach also includes a numerical correction for the design effect. The validation team confirmed that the proposed sampling plan will ensure that samples are randomly selected and representative of the population.

Hence, the validation team concluded that for those parameters for which a sampling approach is indicated in the PoA-DD (namely $FC_{BL,y}$, $FC_{PE,y}$, N_k , t , $N_{LT,y}$, Proper sludge application ratio), the sampling is deemed adequate and found to satisfy the applicable requirements of EB 65, Annex 2.

5.2.9 Project Management Planning

Management structure of the monitoring plan is defined in Section A.4.4 and E.7.2 and is assessed to be appropriate for the purpose of the projects monitoring. The overall responsibility for the monitoring will be held by the CME Chengdu Oasis Science & Technology Co., Ltd. Besides the SREO is entrusted by the CME w.r.t. manage and administer all technical issues and especially to managing the work of City, County and district level Rural Energy Offices as well as the cooperation with existing Agricultural Service Centres and Villages Committees. All monitoring data will be kept at the CME or the database system managed by the CME. Emission reduction calculation will be based on data collected and installed in database system. The database system is confirmed as the data management system designed specifically for the PoA to ensure the data accuracy, to avoid double counting, to addressing uncertainty (QA/QC), and to manage 100% monitoring data storage for the monitoring of all CPAs.

The CME has established following operational and management arrangements:

- A record keeping system for each CPA under the PoA,
- A system/procedure to avoid double accounting e.g. to avoid the case of including a new CPA that has been already registered either as a CDM project activity or as a CPA of another PoA,
- The SSC-CPA included in the PoA is not a de-bundled component of another CDM programme activity (CPA) or CDM project activity.

- The provisions to ensure that those operating the CPA are aware of and have agreed that their activity is being subscribed to the PoA;

The Sichuan Rural Energy Office will be responsible for the monitoring management of the CPAs. The conduction of the monitoring and collection of the data will be forwarded to the city and county level REOs. Thereby, a decentralized data collection system will compile the data and submit it to the Chinese Academy of Agricultural Engineering (CAAE) for statistical analysis. The complete data will finally be submitted to the CME, which evaluates the data and compiles the monitoring reports for the single CPAs.

Emission reduction calculation will be based on data collected and installed in CME database.

CME has provided a management plan in line with EB 65 Annex 3 §17. The management plan was made available to the DOE, which can confirm that the CME has developed and implemented a management system that includes

- a) A clear definition of roles and responsibilities of personnel involved in the process of inclusion of CPAs, including a review of their competencies;
- b) Records of arrangements for training and capacity development for personnel;
- c) Procedures for technical review of inclusion of CPAs;
- d) A procedure to avoid double counting (e.g. to avoid the case of including a new CPA that has already been registered either as a CDM project activity or as a CPA of another PoA);
- e) Records and documentation control process for each CPA under the PoA;
- f) Measures for continuous improvements of the PoA management system;
- g) Any other relevant elements.

Related sections in PoA-DD and CPA-DD substantiate the stated.

According to the methods specified in section A.4.4.2 and E. 7.2 of the PoA-DD, statistically sound sampling methods and procedures to be used by DOEs for inclusion and verification of ERs achieved by CPAs under the PoA have been defined. A dedicated Monitoring Sampling Plan has been developed by the CME.

The DOE has validated the Monitoring Sampling Plan and can confirm compliance with EB 65 Annex 2.

Nevertheless, CAR PoA-A12, CAR PoA-A13, CL PoA-A 14, CAR PoA-A 15, CAR PoA-A 16 and CAR PoA-E14 were raised and successfully closed.

5.2.10 Crediting Period and PoA Duration

As per the PoA requesting registration uploading procedures, the start date of the PoA is defined as the starting date of the whole PoA crediting period. The start date of crediting period has been unambiguously stated in the PoA-DD section B.1, i.e. 2012-05-10 or on the date of registration, whichever is later. The PoA duration is stated in the PoA-DD section B.2 as 28 years, which is deemed appropriate.

Nevertheless, CAR PoA-B1 was raised and successfully closed.

5.2.11 Environmental Impacts

Environmental Analysis is chosen to be done at PoA level.

For such small scale biogas digesters installed under the proposed programme, no environmental impact assessment is required. This has been verified via interview with representatives from provincial development and reform commission during onsite visit^{/IM02/}. However a basic evaluation of environmental impacts has been conducted by the SREO on PoA level. A summary of the results including transboundary impacts is provided in section C.2 of the PoA-DD. Neither significant environmental impacts nor transboundary impacts have been observed.

Nevertheless, CAR PoA-C1 was raised and successfully closed.

5.2.12 Comments by Local Stakeholders

The PP followed the invitation procedure for stakeholder comments on the PoA level in line with relevant requirements.

The local stakeholder consultation was conducted twofold. The CME together with the Sichuan Rural Energy Office invited all corresponding City and County Level Rural Energy Office representatives and representatives were encouraged to provide comments. Besides, 352 questionnaires have been distributed to project households and one neighbouring household in each of the 176 towns in Yibin.

Based on the on-site validation investigation, all relevant local stakeholders have been invited to comment on the PoA and the first CPA, and a summary of comments is available in section D.2 of the PoA-DD. And given the positive comments received, no significant comment was necessary to be taken into account.

Corresponding findings CAR PoA-D1 has been raised and successfully closed.

5.2.13 CPA Eligibility Criteria

A complete list of CPA Eligibility Criteria has been set up in section A.4.2.2 of the PoA-DD and section B.2 of the generic CPA-DD, and is deemed appropriate and sufficient. For detailed assessment, please refer to Annex 6 of this validation report.

6 VALIDATION OPINION

UPM Umwelt-Projekt-Management GmbH has commissioned the TÜV NORD JI/CDM Certification Program (CP) to validate the programme of activities (PoA): "Sichuan Rural Poor-Household Biogas Development Programme" with regard to the relevant requirements of the UNFCCC for CDM project activities, as well as criteria for consistent project operations, monitoring and reporting. UNFCCC criteria include article 12 of the Kyoto Protocol, the modalities and procedures for CDM (Marrakech Accords) and the relevant decisions by COP/MOP and CDM Executive Board.

In the course of the validation 27 Corrective Action Requests (CARs) and 8 Clarification Requests (CLs) for PoA-DD and 1 CAR for generic CPA-DD were raised and all have been successfully closed. No FAR has been raised and has no impact on issues related to registration.

The review of the PoA design documentations and additional documents related to baseline and monitoring methodology; the subsequent background investigation, follow-up interviews and review of comments by parties, stakeholders and NGOs have provided TÜV NORD JI/CDM CP with sufficient evidence to validate the fulfilment of the stated criteria.

In detail the conclusions can be summarised as follows:

- The PoA is in line with all relevant host country criteria (China) and all relevant UNFCCC requirements for CDM. Project activity approval have been obtained from DNA of China vide the Letter of Approval (HCA) dated 2011-12-06 and vide the. Letter of approval from Annex I country UK (LOA) dated 2012-01-19.
- The baseline has been appropriately identified as per the applied methodology.
- The PoA additionality is sufficiently justified in the PoA-DD.
- The eligibility criteria established for CPA inclusion are deemed appropriate and sufficient.
- The monitoring plan is transparent and adequate.
- The calculation of the emission factors and the CPA emission reductions is carried out in a transparent and conservative manner.
- Information on the local stakeholders' consultation by the project participants prior to submitting the PoA for validation is sufficiently provided in the PoA-DD.
- All information has been also consistently applied in the generic CPA-DD form.

The conclusions of this report show, that the PoA, as it was described in the project documentations, is in line with all criteria applicable for the validation.

Essen, 2012-04-05



Mr. Stefan Winter
TÜV NORD JI/CDM CP
Validation Team Leader

Essen, 2012-04-05



Mr. Rainer Winter
TÜV NORD JI/CDM CP
Final Approval

7 REFERENCES

Table 7-1: Documents provided by the project participant

Reference	Document
/APP/	CPA approval letter from C/ME for CPA SCHHBG-2010-001 CPA inclusion letter from C/ME & SREO for CPA SCHHBG-2010-001
/ASA/	Statement on Aerobic Sludge Application by Rural Biogas Association
/BEN/	SREO household digester benefit analysis.pdf
/BH/	Biogas Handbook, 2008, Published by University of Southern Denmark Esbjerg, Niels Bohrs Vej 9-10, DK-6700 Esbjerg, Denmark
/BS/	Baseline survey Survey on Potential Household for Biogas Construction_2008 Survey on Potential Household for Biogas Construction_2009
/CERT/	Certificates from technicians designing and constructing the biogas digester (accredited by MoA)
/CON/	Contract between C/ME with the Sichuan Rural Biogas Office (SREO) Contract between C/ME with the Sichuan Biogas Association Contracts between C/ME & Households Confirmation letter by SREO
/DCDM/	Supporting documents for prior consideration of CDM: Prior Consideration Mail from UNFCCC
/DEC/	Double counting declaration by C/ME for CPA SCHHBG-2010-001 Declaration by SREO on ODA
/EIA/	Classification of Construction Project Management Directory of Environmental Impact Assessment The monitoring Report on the indoor air quality in Sichuan
/HCA/	Letter of approvals from the host party P. R. China issued on 2011-12-06
/LIST/	List of households for CPA SCHHBG-2010-001
/LOA/	Letter of approval from the Annex I Party UK issued on 2012-01-19
/MAN/	Maintenance and safety regulations for digester
/MAT/	2008 annual average temperature data for Sichuan Province from Sichuan Statistical Yearbook

Reference	Document
/MOC/	Modalities of Communication
/MoM/	Minutes of meeting between C/ME, DOE and Sichuan Provincial Environmental Protection Department
/MP/	Management Plan by CME for the PoA
/MS/	Monitoring survey
/PDDs/	<p>Draft Programme Design Documents hosted from 2010-10-28 to 2010-11-26:</p> <ol style="list-style-type: none"> 1. "Sichuan Rural Poor-Household Biogas Development Programme" (version 1.0, 2010-10-26) 2. "Sichuan Rural Poor-Household Biogas Development Programme, CPA Nb. SCHHBG-XXXX-XX"(version 1.0, 2010-10-26) 3. "Sichuan Rural Poor-Household Biogas Development Programme, CPA Nb. SCHHBG-2010-01"(version 1.0, 2010-10-26)
/PDDs-F/	<p>Final Programme Design Documents :</p> <ol style="list-style-type: none"> 1. "Sichuan Rural Poor-Household Biogas Development Programme" (version 1.6, 2012-04-03) 2. "Sichuan Rural Poor-Household Biogas Development Programme, CPA Nb. SCHHBG-XXXX-XX"(version 1.4, 2012-04-03) 3. "Sichuan Rural Poor-Household Biogas Development Programme, CPA Nb. SCHHBG-2010-01"(version 1.4, 2012-04-03)
/RHBC/	Rural Household Biogas & Conservation Tillage CDM Project Development APCAEM-ESCAP Beijing, 2010
/SG/	Stakeholder Guideline
/SHC/	<p>Evidences on stakeholder consultation:</p> <ol style="list-style-type: none"> 1. Participation list of stakeholder meeting conducted 2010-10-19 2. Questionnaires
/SNP/	Service Network Plan
/SP/	<p>Sampling Plan dated 2012-01-18 Monitoring Sampling Plan dated 2012-01-18</p>
/STAND/	<p>Related national or international standards or laws:</p> <ol style="list-style-type: none"> 1. The Agricultural Law (2003) 2. Energy Conservation Law (2007) 3. Renewable Energy Law (2004) 4. 2006 – 2010 Rural Energy Development Plan 5. GB/T 4750-2002: Collections of Standard Design Drawings of Household Anaerobic Digesters 6. GB/T 3606-2001: Domestic Biogas Stove 7. GB/T 4751-2002: Specification for Check and Acceptance of the Quality of Household Anaerobic Digesters 8. GB/T 4752-2002: Operation Rules for Construction of Household Anaerobic Digesters

Reference	Document
	<ul style="list-style-type: none"> 9. NY/T 465-2001: Household-Scaled Biogas & Integrated Farming System-Specification on Design, Construction and Use for Southern Model 10. NY/T1496.1-2007: Biogas Transmission System for rural household <ul style="list-style-type: none"> a. Part 1 : Thermoplastic Pipes b. Part 2 : Thermoplastic Pipe Fittings c. Part 3 : Thermoplastic Waves 11. NY/T 1639-2008: Technical Criterion on Rural Biogas Digesters and Three Renovations 12. NY/T 858-2004: Biogas Pressure Meter 13. NY/T 859-2004: Desulfuricer household biogas 14. NY/T 860-2004: Digester sealing Coatings 15. DB51/T 770-2008(Sichuan): The Criterion of Supportive Installation on Rural Household Biogas Digester 16. GB 18596-2001: Discharge standard of pollutants for livestock and poultry breeding
/TEST/	Stove test report by Ministry of Agriculture Biogas product & equipment quality supervision and testing center, dated 2009-12-14
/THD/	SREO regulation on mandatory transmission of household data
/TRAIN/	Learning material for biogas technician
/WSWP/	Provincial Rural Energy Working Summary in 2009 and Working Plan in 2010
/XLS/	<ul style="list-style-type: none"> Emission reduction calculation spreadsheet (initial and final) Financial analysis spreadsheet (initial) Annual average CERs in first Crediting Period

Table 7-2: Background investigation and assessment documents

Reference	Document
/AMS.I.C/	Thermal energy for the user with or without electricity (Version 18)
/AMS.III.R/	Methane recovery in agricultural activities at household/small farm level (Version 1)
/AMS.I.C /	Thermal energy production with or without electricity (Version 18)
/Tool/	Other tools if necessary
/CPM/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)
/GCP/	UNFCCC: Guidelines for completing the simplified project design document (CDM-SSC-POA-DD) and the form for proposed new small scale methodologies (CDM-SSC-NM)

Reference	Document
/IPCC-GP/	IPCC Good Practice Guidance & Uncertainty Management in National Greenhouse Gas Inventories, 2000
/IPPC-RM/	Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual
/POA-DDs-T/	CDM-SSC-PoA-DD - Small-Scale CDM Programme of Activities Design Document form (version 01, EB 33 Annex 43) CDM-SSC-CPA-DD - Small-Scale CDM Programme Activity Design Document form (version 01, EB 33 Annex 44)
/POAR/	<ol style="list-style-type: none"> Clean Development Mechanism Validation and Verification Manual (v01.2; EB55 Annex 1, esp. para 165 – 168) “Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities” (current version 04.1, EB 55 Annex 38) (the “PoA Procedures”); “Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities” (current version 01.0, EB63 Annex 3) (the “PoA Standard”) “Procedures for review of erroneous inclusion of a CPA” (current version 02, EB 55 Annex 37) (the “CPA Review Procedures”) Guidance for determining the occurrence of de-bundling under a programme of activities (PoA) (v03, EB54 Annex 13) “Procedures for approval of the application of multiple methodologies to a programme of activities” (current version 01; EB 47 Annex 31) (the “Multi-Meth Approval Procedures”); “General guidelines for sampling and surveys for SSC project activities” (current version 02, EB65 Annex 2) (the “Sampling Guidelines”) “Guidance on the registration of project activities under a programme of activities as a single CDM project activity (EB32, annex 38) Guidelines on Project Design Documents (PDDs) on http://cdm.unfccc.int/Reference/Guidclarif/pdd/index.html
/KP/	Kyoto Protocol (1997)
/MA/	Decision 3/CMP. 1 (Marrakesh – Accords & Annex to decision (17/CP.7))
/VVM/	Validation and Verification Manual (Version 1.2; EB 55 Annex 1)

Table 7-3: Websites used

Reference	Link	Organisation
/dna/	<ol style="list-style-type: none"> Http://cdm.ccchina.gov.cn/english/index.asp 	1. National Development and Reform Commission (DNA of China) (DNA host country website)

Reference	Link	Organisation
	http://www.decc.gov.uk/en/content/cms/emissions/eu_ets/eu_ets.aspx and http://www.environment-agency.gov.uk/default.aspx	2. Environment Agency (DNA Annex-I country website)
/cd4cdm/	www.cd4cdm.org	UNEP Riso Centre
/gov/	http://www.ehome.gov.cn/Article/Class1/201005/6801.html http://www.ehome.gov.cn/Article/Class1/201104/7185.html	The Central People's Government of the People's Republic of China
/ipcc/	www.ipcc-nggip.iges.or.jp	IPCC publications
/unfccc/	http://cdm.unfccc.int	UNFCCC

Table 7-4: List of interviewed persons

Reference	Mol ¹	Date		Name	Organisation / Function
/IM01/	V	2011-01-17 to 2011-01-21	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Wang Hai	Chengdu Oasis Science & Technology Co., Ltd.
/IM01/	V	2011-01-17 to 2011-01-21	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Henning Huenteler	Oasis Science & Technology (Beijing) Co., Ltd.
/IM01/	V	2011-01-17 to 2011-01-21	<input type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms	Fu Yinyin	Oasis Science & Technology (Beijing) Co., Ltd.
/IM02/	V	2011-01-17 to 2011-01-21	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Qu Feng	Director Sichuan Rural Energy Office
/IM02/	V	2011-01-17 to 2011-01-21	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Yin Xianzhi	Director Sichuan Rural Energy Office
/IM02/	V	2011-01-17 to 2011-01-21	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Song Yumin	Sichuan Rural Energy Office
/IM02/	V	2011-01-17 to 2011-01-21	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Zhou Jun	Sichuan Provincial Environmental Protection Bureau
/IM02/	V	2011-01-17 to 2011-01-21	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	An Wen	Sichuan Provincial Dept. of



Reference	Mol ¹	Date		Name	Organisation / Function
					Agriculture
/IM02/	V	2011-01-17 to 2011-01-21	<input checked="" type="checkbox"/> Mr. <input type="checkbox"/> Ms	Wang Zhibing	Sichuan Provincial Development and Reform Committee
/IM03/	V, T	2011-01-17 to 2011-01-21	<input checked="" type="checkbox"/> Mr. <input checked="" type="checkbox"/> Ms	More than one hundred	List of rural Farmers

¹⁾ Means of Interview: (Telephone, E-Mail, Visit)

ANNEX

- A1:** Validation Protocol
- A2:** Assessment of Baseline Identification
- A3:** Assessment of Financial Parameters
- A4:** Assessment of Barrier analysis
- A5:** Outcome of the GSCP
- A6:** Eligibility Criteria Assessment
- A7:** Appointment certificates of the team members

ANNEX 1: VALIDATION PROTOCOL

Table A-1-1: CDM-POA-DD Requirements Checklist

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
A. General Description of the Programme of Activities				
A.1. Title of the PoA	<i>Document information shall be checked</i>			
A.1.1. Are title, current version number and the date of document completion given in section A.1 of the PoA-DD?	<p><i>Description:</i> The title of the PoA-DD, the version number and the date of completion are appropriately provided under section A.1 of PoA-DD.</p> <p><i>Justification of evidences:</i> During the document review, the PoA-DD and PoA-DD template have been checked.</p> <p><i>Conclusion:</i> No incompleteness has been identified, the requirement is fulfilled.</p>	/PDDs/ /PoA-DDs-T/ /POAR/	OK	Ok
A.1.2. Has the latest version of the CDM-SSC-POA-DD form been applied? (EB 55 Annex 1, § 55) <i>The latest version is available at http://cdm.unfccc.int/Reference/PDDs_Forms/PoA/index.html</i>	<p><i>Description:</i> The latest version of the CDM SSC-POA-DD form has been applied. However, the front page of the PoA-DD has been altered to two pages rather than original one page from the template. As per footer of the CDM SSC-PoA-DD template, "This template shall not be altered. It shall be completed without modifying/adding headings or logo, format or font", thus the PoA-DD formatting shall be revised accordingly.</p> <p><i>Justification of evidences:</i> By visiting the UNFCCC website http://cdm.unfccc.int/Reference/PDDs_Forms/PoA/index.html for the</p>	/PDDs/ /PoA-DDs-T/ /POAR/	CAR PoA- A1	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	latest PoA-DD template and compare with the provided PoA-DD. <i>Conclusion:</i> CAR PoA-A1 was raised and correction is necessary.			
A.1.3. Has the POA-DD been duly filled in accordance with the latest guidance(s) and procedures and all information are consistently described? (EB 55 Annex 1, §§ 56, 57) <i>As currently no guidelines for completing the PoA-DD are available the guidelines for completing the LSC/ SSC project shall be considered where deemed applicable.</i>	<i>Description:</i> The CDM-PoA-DD submitted for validation is applying CDM-SSC-PoA-DD (version 01). <i>Justification of evidences:</i> The validation team has checked the UNFCCC CDM website and has confirmed that the latest version of guideline for completing CDM-SCC-POA-DD is Version 04, and all sections in provided PoA-DD have been duly filled in accordance with this guideline. No section has been either left blank or wrongly filled. No deviation thereof has been observed. <i>Conclusion:</i> The PoA-DD has been duly filled in accordance with the latest UNFCCC Guidelines for completing CDM-SCC-POA-DD (Version 01).	/PDDs/ /POADD s-T/ /unfccc/	Ok	Ok
A.2. Description of the PoA	<i>Description regarding the general operating and implementing framework, the policy measure and the voluntary action shall be checked</i>			
A.2.1. Has a sufficient description of general operating and implementing framework of the PoA been given? (EB 55 Annex 38, § 6)	<i>Description:</i> There is a description of the general operating and implementing framework of the PoA in section A.2 of the PoA-DD; however, it has not sufficiently explained the functions and correlations of all entities involved, e.g., CME, the SREO and its subsidiaries, the equipment supplier, OASIS, etc. Further correction is necessary. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CAR PoA-A2 was raised and correction is necessary.	/PDDs/ /POAR/	CAR PoA- A2	Ok
A.2.2. Is the PoA describing the policy/measure or stated goal that the PoA seeks to promote in a transparent and sufficient	<i>Description:</i> The Stated goal of the proposed PoA is to “enable the poor population of the rural areas in Sichuan to participate in the existing biogas subsidy programme provided by the Sichuan Rural	/PDDs/ /POAR/	GL PoA- A3	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
manner? (EB 55 Annex 38, §6 (c)) <i>This encompasses incentive schemes and voluntary programmes, which leads to anthropogenic GHG emission reductions or net anthropogenic greenhouse gas removals by sinks.</i>	Energy Office” via financial support and technical support from the PoA. However, the description has not sufficiently and transparently provided information regarding how the incentive schemes from PoA will support to promote the stated goal. Besides, it is unclear on what basis the PoA will "increase the achieved emission reductions" and whether it will have impact on emission reduction calculations. <i>Justification of evidences:</i> Via document review, the validation team identifies the description is not sufficient and transparent. <i>Conclusion:</i> CL PoA-A3 was raised and clarification is necessary.			
A.2.3. Has a confirmation been given that the proposed PoA is a voluntary action by the coordinating/managing entity? (EB 55 Annex 38, §6(d))	<i>Description:</i> A confirmation has been given in section A.2 of the POA-DD that the proposed PoA is a voluntary action coordinated by the CME. However, further information and evidences shall be given regarding the subsidy programme that this PoA seeks to promote, esp. on whether it is also a voluntary subsidy programme and whether there is a limit or target of this subsidy programme. <i>Justification of evidences:</i> By means of document review and background information research. <i>Conclusion:</i> CL PoA-A4 was raised and clarification is necessary.	/PDDs/ /POAR/	CL PoA- A4	Ok
A.2.4. Will the PoA create other environmental or social benefits than GHG emission reductions? (EB 55 Annex 1, §§ 125 – 127) <i>Describe the other positive aspects not related to GHG emission reduction on the environment.</i>	<i>Description:</i> The PoA also creates other environmental and social benefits other than GHG emission reductions as follows: <ul style="list-style-type: none"> • Alleviating the national energy pressure through thousands of households using the biogas renewable energy; • Distribution of biogas digesters enables those Households independent from coal for cooking and heating, leading to continuous and substantial expenditure savings. • Improving local environment and reducing indoor air pollution by 	/PDDs/ /OM/	Ok	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	replacing traditional coal stoves and reduce coal consumption. <ul style="list-style-type: none"> Improving living condition and public health by reducing the indoor coal consumption and installing a proper animal manure management system, common diseases caused by coal burning and improper handling of manure, such as respiratory diseases, eye ailment etc. will be reduced. Promoting sustainable development of local agriculture. <i>Justification of evidences:</i> By means of document review and onsite visit. <i>Conclusion:</i> No significant deviation is found from the description in the PoA-DD and this requirement is deemed fulfilled.			
A.2.5. Has information regarding the annual average emission reductions of the PoA or the 1 st CPA over the first crediting period been included in the description of the PoA? <i>PoA Requesting for Registration uploading step 4 requirement.</i>	<i>Description:</i> As per PoA requesting registration uploading step 4, please include an estimation of annual average emission reductions of the 1 st CPA over the first crediting period in section A.2 of the PoA-DD. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CL PoA-A5 was raised and clarification is necessary.	/PDDs/ /unfccc/	CL PoA-A5	Ok
A.3. CME and Participants of PoA	<i>Description regarding the CME and the project participants shall be included</i>			
A.3.1. Does the section A.3 of the POA-DD include identification of the coordinating/managing entity (a private or public entity), Host Party(ies) and PoA participants? (EB 55 Annex 38, §4, 6 (a)) <i>Project participants may or may not be involved in one of the CPAs related to the PoA. The operators of individual CPAs are not</i>	<i>Description:</i> Section A.3 of the PoA-DD has included identification of the CME and host country Participant as “Chendu Oasis Science and Technology Co., Ltd”, the host party as “People’s Republic of China” and the other PoA Participant as “UPM Umwelt-Projekt-Management GmbH” from Germany. <i>Justification of evidences:</i> By means of document review.	/PDDs/ /POAR/	OK	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>required to be project participants. CDM programme participation is only recorded at the PoA level. (EB 55 Annex 38, §8)</i>	<i>Conclusion:</i> Required information is sufficiently filled in section A.3 of the PoA-DD.			
<p>A.3.2. Is there any Party directly involved as project participant, and if yes, is that Party's contact details included in annex 1 of the PoA-DD and is the information provided internally consistent with section A.3 of the PoA-DD?</p> <p>(EB 55 Annex 1, § 52)</p>	<p><i>Description:</i> As per the PoA-DD section A.3, there is no Party directly involved in the PoA.</p> <p><i>Justification of evidences:</i> By means of document review and onsite interviews.</p> <p><i>Conclusion:</i> No deviations have been identified as described in the PoA-DD.</p>	<p>/PDDs/ /OM/</p>	<p>OK</p>	<p>Ok</p>
<p>A.3.3. Has it been confirmed by the MOC that Coordinating/managing entity of the PoA communicates with the Board, and all Project participants information in the MoC is consistent with the PoA-DD? (EB 55 Annex 38, §11)</p> <p><i>Procedures for modalities of communication between project participants and the Executive Board. shall apply, with the exception that the coordinating/managing entity shall be either sole or joint focal point for each area of communication. The limit of joint focal points for the programme shall be 5, or equal to the number of host Parties if greater than 5.</i></p>	<p><i>Description:</i> At draft validation stage, the MoC has not yet been submitted by the PP. All information shall be checked upon submission of the MOC.</p> <p><i>Justification of evidences:</i> By means of document review.</p> <p><i>Conclusion:</i> CAR PoA-A6 was raised and correction is necessary.</p>	<p>/PDDs/</p>	<p>CAR PoA- A6</p>	<p>Ok</p>
<p>A.3.4. Have the coordinating/managing entity and all Project Participants listed in section A.3 of the POA-DD obtained letter of approvals on their participation in the PoA respectively?</p> <p>(EB 55 Annex 38, §9; EB 55 Annex 1 §44, 51, 52)</p> <p><i>Indicate whether a letter of approval has been received, with a clear reference to the supporting documentation.</i></p>	<p><i>Description:</i> The letters of approvals from all PoA participants have not yet been provided by the PP at the draft validation stage. All information shall be checked upon the submission.</p> <p><i>Justification of evidences:</i> By means of document review.</p> <p><i>Conclusion:</i> CAR PoA-A7 was raised and correction is necessary.</p>	<p>/PDDs/</p>	<p>CAR PoA- A7</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p><i>Indicate whether this letter was provided to the validation team by the project participants or directly by the DNA.</i></p> <p><i>Letters of approval shall be issued in accordance with the guidance provided by the CDM Executive Board (EB16, Annex 6)</i></p>				
<p>A.3.5. Does each of the written approvals confirm the following information:</p> <ul style="list-style-type: none"> i) that the corresponding party is a Party to the Kyoto Protocol; ii) that the participation is voluntary; iii) that the project contributes to the sustainable development in the country (only for host country approval(s)); iv) that the project participant's information is exactly the same as in the PoA-DD; v) that the PoA title referred in the approvals is consistent with the one in the POA-DD submitted for registration, or is there an additional specification of the PoA, e.g. POA-DD version number; vi) that the CME is authorized for its coordination and implementation of the PoA from each Host Party (only for host country approval(s)); vii) that the approvals are unconditional w.r.t. the above points? 	<p><i>Description:</i> The letters of approvals from all PoA participants have not yet been provided by the PP at the draft validation stage. All information shall be checked upon the submission.</p> <p><i>Justification of evidences:</i> By means of document review.</p> <p><i>Conclusion:</i> CAR PoA-A7 was raised and correction is necessary.</p>	<p>/PDDs/</p>	<p>CAR PoA- A7</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
(EB 55 Annex 1 §45 (a-d), 46, EB 55 Annex 38 §10) <i>CME's coordination of the PoA can be authorized in the letters of approval from each Host Party or in a separate confirmation letter from each Host Party.</i>				
A.3.6. Are there any other project participants approved but not listed in the POA-DD? (EB 55 Annex 1, § 52)	<i>Description:</i> The letters of approvals from all PoA participants have not yet been provided by the PP at the draft validation stage. All information shall be checked upon the submission. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CAR PoA-A7 was raised and correction is necessary.	/PDDs/	CAR PoA- A7	Ok
A.3.7. Are the approvals issued from organisations listed as DNAs on the UNFCCC CDM website? (EB 55 Annex 1 §§ 44, 47, 48, 49 (b), 49 (c), 53) <i>Indicate the means of validation employed to assess the authenticity, i.e. in case of doubt whether LoA has been verified with the DNA. Further describe which entity submitted the LoA for validation.</i>	<i>Description:</i> The letters of approvals from all PoA participants have not yet been provided by the PP at the draft validation stage. All information shall be checked upon the submission. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CAR PoA-A7 was raised and correction is necessary.	/PDDs/	CAR PoA- A7	Ok
A.4. Technical description of the PoA	<i>Location, boundaries, technical description, eligibility criterion, additionality, operational and management plan as well as monitoring plan shall be addressed.</i>			
A.4.1. Location of the PoA				
A.4.1.1. Host parties	<i>Location of the PoA shall be addressed and checked.</i>			
A.4.1.1. Have all host countries been correctly listed in section A.4.1.1 of the PoA-DD?	<i>Description:</i> The only host party of the proposed PoA is the "People's Republic of China", however the name of the country was	/PDDs/	CAR PoA-	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
(EB 55 Annex 1, § 52)	not fully correctly listed in section A.4.1.1 of the PoA-DD, minor correction is necessary. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CAR PoA-A8 was raised and correction is necessary.		A8	
A.4.1.2. Physical / Geographical boundary	<i>Assessment of physical / geographical boundaries of the PoA and application of national and sectoral policies / regulations within the defined boundary.</i>			
A.4.1.2.1. Does the POA-DD include a definition of the boundary for the PoA in terms of a geographical area (e.g., municipality, region within a country, country or several countries) within which all CPAs included in the PoA will be implemented? (EB 55 Annex 38, §6(b))	<i>Description:</i> The PoA-DD includes a definition of the geographical area of the PoA as “the administrative boundary of Sichuan province, China”, within which all CPAs included in the PoA will be implemented. <i>Justification of evidences:</i> By means of document review and onsite visit. <i>Conclusion:</i> There is no deviation identified from the description provided in the PoA-DD.	/PDDs/ /OM/	OK	Ok
A.4.1.2.2. Has a clear map with English translations been provided, which unambiguously delineates the geographical boundary of the PoA? (EB 55 Annex 38, §6(b))	<i>Description:</i> Figure 1 in PoA-DD section A.4.1.2 provides a clear map with sufficient English translation regarding the PoA boundary and is deemed unambiguously delineating the geographical boundary of the PoA. <i>Justification of evidences:</i> By means of document review and host country auditor confirmation. <i>Conclusion:</i> There is no deviation identified from the description provided in the PoA-DD.	/PDDs/ /OM/	OK	Ok
A.4.1.2.3. Are all applicable national and/or sectoral policies and regulations within that chosen boundary reflected in the	<i>Description:</i> There is no confirmation in section A.4.1.2 of the PoA-DD on whether all applicable national and/or sectoral policies and regulations within Sichuan province have been reflected in	/PDDs/ /POAR/	CAR PoA- A8	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
determination of the baseline? (EB 55 Annex 38, §6(b))	determination of baseline. Further information is necessary. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CAR PoA-A8 was raised and correction is necessary.			
A.4.2. Description of a typical CPA	<i>The description of the technology and the eligibility criteria shall be checked.</i>			
A.4.2. Has the POA-DD unambiguously defined a CDM programme activity (CPA) under the PoA? (EB 55 Annex 38, §6)	<i>Description:</i> Section A.4.2 of the PoA-DD has unambiguously defined a typical CPA under the PoA as: “the instalment and operation of a large number of household biogas systems during a certain time period at low-income households located in Sichuan province, China” and “A CPA builds on and integrates into the existing subsidy and implementation program for household bio digesters of the Sichuan Rural Energy Office (SREO) and its subsidiaries.” <i>Justification of evidences:</i> By means of document review and onsite visit. <i>Conclusion:</i> The description is deemed sufficient and reflects the reality.	/PDDs/ /OM/	OK	Ok
A.4.2.1. Technology or measures to be employed by the CPA	<i>The description of the technology / measures shall be checked.</i>			
A.4.2.1.1. Does the PoA-DD contain a clear, accurate and complete description of the CPAs with regard to the technology / measures to be used? (EB 55 Annex 1, §§ 58, 59; EB 55 Annex 38, §6(f)) <i>The PoA-DD shall contain a clear description of a typical CPA</i>	<i>Description:</i> The PoA-DD contains a clear description of the technology and measure to be used under the PoA. However the section should be clarified and specified w.r.t. accuracy and completeness. <i>Justification of evidences:</i> By means of onsite visit, national and regional standard and PDDs.	/PDDs/ /STAND/	CAR PoA- A9	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p><i>which provides the reader with a clear understanding of the precise nature of the project activity and the technology / measure to be used.</i></p> <p><i>Describe the process undertaken to validate the accuracy and completeness of the CPA description.</i></p>	<p>Conclusion: CAR PoA-A9 has been raised due to the reasons that</p> <ol style="list-style-type: none"> 1. The heating purpose of the biogas utilization is unclear, further elaboration is necessary. 2. The typical design of the biogas digester does not provide the possible range of the capacity and efficiency, as well as what design differences will be insignificant to a typical one. 			
<p>A.4.2.1.2. Is this description in accordance with the real situation or, in case of greenfield projects, is it most likely that the project will be implemented acc. to the project description? (EB 55 Annex 1, §§63, 64)</p>	<p>Description: The description as per PoA-DD states that biogas digester system is installed along with a figure of a typical design. Besides the recovered methane from the digester is cleaned by desulphurization and dehydration equipment and used for cooking and heating purposes e.g. by cooking stoves, rice cookers, heaters, etc. replacing coal as fuel.</p> <p>Justification of evidences: By means of onsite validation, PDDs and national and regional standard.</p> <p>Conclusion: During onsite visit DOE during course of validation has conducted visit and interviews of a randomly chosen sample group of farmers under this PoA. It has been identified that a high number of single project activities are either already in operation or during different construction stages. W.r.t. this onsite visit the DOE could confirm that the description is in accordance with the real situation and will be most likely implemented as per PoA-DD description. However CAR PoA-A9 has been raised.</p>	<p>/PDDs/ /STAND/ /OM/</p>	<p>CAR PoA- A9</p>	<p>Ok</p>
<p>A.4.2.1.3. In case the project involves alteration of the existing installation or process, is a clear description available regarding the differences between the project and the pre-project situation?</p>	<p>Description: Only new digesters will be installed. No alteration of existing equipment will take place. A corresponding eligibility criterion is established 4) f) "Install a NEW HH biogas digester [...]"</p> <p>Justification of evidences: By means of PDDs</p>	<p>/PDDs/</p>	<p>Ok</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
(EB 55 Annex 1, §§63, 64) <i>Describe the steps taken to validate this issue.</i>	<i>Conclusion:</i> Only new digesters will be installed and eligibility criterion is established this point is deemed ok.			
A.4.2.1.4. Does the project use state of the art technology or would the technology result in a significantly better performance than any commonly used technologies in the host country? <i>Describe the process undertaken to assess the state of the art technology.</i>	<i>Description:</i> The project applies the installation of biogas digesters in accordance to local standard GB/T 4750-2002 for design and construction of a digester. <i>Justification of evidences:</i> By means of PDD, onsite visit, interviews and national and regional standard. <i>Conclusion:</i> DOE during onsite visit could see digesters in different construction stages, before construction start, during construction and in operation. Therefore DOE could confirm that assessed and visited systems are constructed in line with GB/T 4750-2002. Further these type of digester has been already installed in the host country several million times and therefore the DOE considers the system used as mature technology.	/PDDs/ /STAND/ /IM01/ /IM03/	Ok	Ok
A.4.2.2. Eligibility criteria for inclusion of a CPA in the PoA	<i>The eligibility criteria shall be checked for appropriateness and completeness</i>			
A.4.2.2.1. Has the definition of eligibility criteria for inclusion of a CPA under the PoA included the following information: i) appropriate criteria for demonstration of additionality of the CPA, and ii) all type and/or extent of information (e.g. criteria, indicators, variables, parameters or measurements) that shall be provided by each CPA in order to ensure its	<i>Description:</i> <input type="checkbox"/> All eligibility criteria have been clearly described, esp. w.r.t. the following points, and detailed assessments are included in Annex 6 of this report: (1) Methodology applicability requirement of the CPA (2) Other methodological / tool requirement of the CPA, (3) Technical requirement of the CPA, including procurement (4) Geographic requirement of the CPA boundary (5) De-bundling criterion for the CPA (6) Confirmation of no double-counting (7) Public funding requirement of the CPA	/PDDs/ /POAR/ /OM/	CAR POA- A10	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>eligibility? (EB 55 Annex 38, §6(g))</p> <p><i>Assess the specified eligibility criteria in the POA-DD in order to determine whether or not these criteria are sufficient to ensure that all CPAs would comply with the CDM requirements applicable to the PoA, these requirements shall include, inter alia,</i></p> <ul style="list-style-type: none"> • <i>the means of demonstrating the additionality of the CPA and</i> • <i>the applicability of the applied methodology.</i> <p><i>The eligibility criteria represents an essential element of ensuring the smooth functioning of programmatic CDM, therefore the validation team may raise CARs which ensure the ease of application of the eligibility criteria. (EB 55 annex 1 para 167).</i></p> <p><i>Detailed assessment on the final criteria are included in the dedicated Annex A-6 of this report.</i></p>	<p>(8) CPA start date not before PoA webhosting date (9) CPA crediting period not exceed the PoA end date (10) Local stakeholder consultation prior to inclusion of the CPA (11) Environmental analysis requirement of the CPA (12) The additionality assessment criteria for each CPA (as per E.5 particularly in E.5.2 of the PoA-DD are met (13) Monitoring requirement of the CPA, including scrapping (14) The CPA shall be approved by the coordinating entity (15) Other eligibility criteria applicable for CPA implementation (16) All supporting documents required are provided.</p> <p><input checked="" type="checkbox"/> Not all eligibility criteria have been clearly described and following findings have been raised accordingly (after successful closure of all the findings, detailed assessments are to be included in Annex 6 of the final report):</p> <p>A list eligibility criteria has been included in section A.4.2.2 of the PoA-DD, however, the following points are still missing:</p> <ul style="list-style-type: none"> n) Methodology applicability requirement of the CPA o) Other methodological / tool requirement of the CPA, a) Technical requirement of the CPA, including procurement b) Confirmation of no double-counting, though the existing criterion No. 4 and 5 have included confirmation requirements from the CPA implementers and households, how to distinguish the already implemented biodigesters and the CPA digesters not clearly explained. c) Public funding requirement of the CPA d) CPA start date not before PoA webhosting date e) CPA crediting period not exceed the PoA end date f) Local stakeholder consultation prior to inclusion of the CPA g) Environmental analysis requirement of the CPA 			

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	<p>h) The additionality assessment criteria for each CPA (as per E.5 particularly in E.5.2 of the PoA-DD are met</p> <p>i) Monitoring requirement of the CPA</p> <p>j) The CPA shall be approved by the coordinating entity</p> <p>k) Other eligibility criteria applicable for CPA implementation</p> <p>Besides, explanation on how to verify the fulfillment to these criteria needs to be specified, e.g., with minimum example evidence that will be provided during inclusion stage and how they will be checked.</p> <p>Furthermore, following issues shall be clarified regarding the existing criteria:</p> <p>vii. No. 2: the terms "CPA operator" and "CPA implementer" are not clearly defined, please clarify;</p> <p>i. No. 4 b): please specify the "latest available average", whether it will be updated regularly every year and each new CPA will apply the new average? Besides, what reliable source will be provided to define the "average" shall be specified and provided;</p> <p>ii. No. 4 c) and d): in case not all households will be visited during inclusion, please specify what evidence or method to prove that all households meet these two criteria;</p> <p>iii. No. 4 g) and h): it is unclear how to monitor these two criteria to be fulfilled.</p> <p><i>Justification of evidences:</i> By means of document review, background research and onsite visit.</p> <p><i>Conclusion:</i> CAR PoA-A10 was raised and correction is necessary.</p>			
A.4.3. Assessment and Demonstration of Additionality of the PoA as a whole	<i>The assessment of additionality shall be validated with focus on whether the PoA itself is not a likely baseline scenario.</i>			
A.4.3. Has it been demonstrated that in the	<i>Description:</i> The stated goal of the related CDM programme activity	/PDDs/	☒	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
absence of the CDM one of the following would have occurred: <ul style="list-style-type: none"> • the proposed voluntary coordinated action would not be implemented, or • the mandatory policy/regulation would be systematically not enforced and that non-compliance with those requirements is widespread in the country/region, or • that the PoA will lead to a greater level of enforcement of the existing mandatory policy /regulation. (EB 55 Annex 38, §6(e)) 	is defined in the PoA-DD and tries to demonstrate the following situation in the absence of the programme activity: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The proposed voluntary measure would not be implemented. <input type="checkbox"/> The mandatory policy/regulation would be systematically not enforced and that non-compliance with those requirements is widespread in the country/region. <input type="checkbox"/> The PoA will lead to a greater level of enforcement of the existing mandatory policy /regulation. However, it has not been sufficiently demonstrated in section A.4.3 of the PoA-DD. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CL PoA-A11 was raised and clarification is necessary.	/POAR/	PoA-A11	
A.4.4. Operational, management and monitoring plan for the PoA	<i>The operational and management arrangements shall be assessed</i>			
A.4.4.1. Operational and management plan	<i>The operational and management plan shall be assessed.</i>			
A.4.4.1.1. Has the coordinating/managing entity established the operational and management arrangements for the implementation of the PoA, which includes a record keeping system for each CPA under the PoA? (EB 55 Annex 38, §6(i)) <i>The arrangements shall be suitable and sufficient to ensure that the CME:</i>	<i>Description:</i> The provided description in section A.4.4.1 of the PoA-DD regarding general operating and implementing framework of the PoA is not sufficient. <i>Justification of evidences:</i> As per EB55 Annex 1, VVM v1.2, para 166, "The arrangements shall be sufficient to ensure that the coordinating/managing entity will have control of all records and information related to the implementation of individual CPAs and will be in a position to ensure each CPA is being operated in accordance with the specific requirements of the programme";	/PDDs/ /POAR/	CAR PoA-A12	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<ul style="list-style-type: none"> will have control of all records and information related to the implementation of individual CPAs and will be in a position to ensure each CPA is being operated in accordance with the specific requirements of the programme. <p>(EB55 annex 1, para 166)</p>	<p>however, section A.4.4.1 of the PoA-DD does not provide sufficient information regarding the requirement, further correction is necessary.</p> <p><i>Conclusion:</i> CAR PoA-A12 was raised and correction is necessary.</p>			
<p>A.4.4.1.2. Are procedures identified for data management?</p> <p>(EB 55 Annex 1 123 (b))</p> <p><i>Check whether appropriate provisions are considered for data management including responsibilities, what records to keep, storage area of records and how to process performance documentation.</i></p> <p><i>Check further the data archiving provisions for the project activity and ensure that provisions are made to archive data for the whole crediting period + 2 years.</i></p>	<p><i>Description:</i> In section A.4.4.1 of the PoA-DD, the record keeping system is insufficient regarding each individual biogas digesters that will be included in the CPA, e.g., the contact details of each user, address, the construction time of the digester, serial number of equipment, etc. especially, how to distinguish the already installed digesters with the CPA digesters shall be unambiguously described. Besides, the description is also missing for storage area of records and how to process performance documentation, as well as whether the data archiving will be kept for the whole crediting period + 2 years.</p> <p><i>Justification of evidences:</i> By means of document review.</p> <p><i>Conclusion:</i> CAR PoA-A13 was raised and correction is necessary.</p>	<p>/PDDs/ /POAR/</p>	<p>CAR PoA- A13</p>	<p>Ok</p>
<p>A.4.4.1.3. Has the arrangements included a system/ procedure to avoid double accounting, e.g., to avoid the case of including a new CPA that has been already registered either as CDM project activity or as a CPA of another PoA?</p> <p>(EB 55 Annex 38, §6(i))</p>	<p><i>Description:</i> In section A.4.4.1 of the PoA-DD, the procedure defined to avoid double counting is deemed not sufficient, since it only requires the self commitment of the CPA implementers, but does not prevent any case of double counting in action by the biogas users, neither having a procedure to reimburse any double counted CERs in any case the users or CPA implementers break the contract. Further clarification is necessary.</p> <p><i>Justification of evidences:</i> By means of document review.</p> <p><i>Conclusion:</i> CAR PoA-A14 was raised and correction is necessary.</p>	<p>/PDDs/ /POAR/</p>	<p>CL PoA- A14</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>A.4.4.1.4. Does a typical CPA qualify as a small scale CDM project activity as defined in decision 4 / CMP.1 annex II?</p> <p>(EB 55 Annex 1, § 136 (a) and EB 47 Annex 32 § 3) Check if the proposed CPAs qualify within the threshold of one or more of the three possible types of small scale project activities.</p>	<p><i>Description:</i> As per decision 4/CMP 1 annex II and applied methodology AMS.I.C version 18 and AMS.III.R version 1, the following requirements shall be met:</p> <ul style="list-style-type: none"> • “The total installed/rated thermal energy generation capacity of the project equipment is equal to or less than 45 MW thermal” (AMS.I.C version 18 para 4) • “Aggregated annual emission reductions of all systems included shall be less than or equal to 60 kt CO2 equivalent.” (AMS.III.R version 1 para 5) <p>In PoA-DD section A.4.2.2, eligibility criteria NO. 6 and 7 have established requirements for each CPA to fulfill the small scale limit:</p> <ul style="list-style-type: none"> • No. 6: The aggregated annual methane-recovery-and-destruction related emission reductions of all biogas systems included in the CPA are less than or equal to 60 ktCO2. • No. 7: The aggregated installed/rated thermal energy generation capacity of all biogas systems included in the CPA is equal to or less than 45 MW thermal. <p>Besides, through onsite visit and background research of the project technology, each biogas digester that will be installed by the PoA will be for household’s utilization, and both capacity of aggregated thermal energy generation capacity and annual emission reduction potential are confirmed not exceeding the required small scale threshold.</p> <p><i>Justification of evidences:</i> By means of document review, background information research and onsite visit.</p> <p><i>Conclusion:</i> No deviation is identified from the description of the</p>	<p>/PDDs/ /POAR/ // /OM/</p>	<p>OK</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	PoA-DD and a typical CPA qualifies as a small scale CDM project activity as defined in decision 4 / CMP.1 annex II.			
<p>A.4.4.1.5. Has it been ensured that the small scale CPA is not a de-bundled component of another CPA or large scale CDM project activity?</p> <p>(EB 55 Annex 1, § 136 (c)) <i>Describe the steps taken to validate this issue. Pl. refer to the Compendium of guidance on debundling (EB 54, Annex 13).</i></p>	<p><i>Description:</i> As per EB 54 Annex 13 “ GUIDELINES ON ASSESSMENT OF DEBUNDLING FOR SSC PROJECT ACTIVITIES” (version 3) para 10:</p> <p>“If each of the independent subsystems/measures (e.g., biogas digester, solar home system) included in the CPA of a PoA is no larger than 1% of the small-scale thresholds defined by the methodology applied, then that CPA of PoA is exempted from performing de-bundling check i.e., considering as not being a de-bundled component of a large scale activity.”</p> <p>“1% of the the small-scale thresholds defined by the methodology applied” for this PoA is 1% of 45MW or 1% of 60ktCO_{2e}, i.e., 450kW or 600tCO_{2e}. In correspondence, eligibility criteria No. 8 established in section A.4.2.2 of the PoA-DD requires the following:</p> <p>“Each of the independent subsystems (the digesters and biogas stoves) is no larger than 1% of the small-scale thresholds defined by the methodologies applied (600 tCO_{2e} emission reduction from methane avoidance, 450 kW thermal installed capacity of the stoves).”</p> <p>However, the de-bundling demonstration is not sufficient, the way of ensure the individual unit to be under 1% of the small scale threshold is not clearly described, and both requirements (600t and 450kW) shall be met, thus the calculation/conversion shall be provided accordingly.</p> <p><i>Justification of evidences:</i> By means of document review, background information research and onsite visit.</p> <p><i>Conclusion:</i> CL PoA-A14 was raised and clarification is necessary.</p>	<p>/PDDs/ /POAR/ // /OM/</p>	<p>CL PoA- A14</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>A.4.4.1.6. Has the CME made provisions to ensure that the CPA operators are aware of and have agreed that their activity is being subscribed to the PoA?</p> <p><i>Describe the steps undertaken by the CME. Check, if deemed necessary, appropriate provisions to meet training needs are in place.</i></p>	<p><i>Description:</i> In section A.4.4.1 of the PoA-DD, it has been confirmed that the “The implementing entity is aware that the CPA will be subscribed to the present PoA.”</p> <p>Besides, eligibility criterion established in section A.4.2.2 of the PoA-DD has also ensured that no CPA will be included unless the following points are fulfilled:</p> <ul style="list-style-type: none"> No. 3: The CPA implementer confirms in a written statement that, b) That he is aware and agrees with the inclusion of the CPA to the proposed PoA. No. 4: All participating households of the CPA: e) Have directly or indirectly entered into a CER Ownership Transfer Contract with the C/ME. <p><i>Justification of evidences:</i> By means of document review and onsite visit interview and onsite document check.</p> <p><i>Conclusion:</i> No deviation has been identified from the description of the PoA-DD.</p>	<p>/PDDs/ /POAR/ /IM01/ /OM/</p>	<p>OK</p>	<p>Ok</p>
<p>A.4.4.1.7. Does the management plan make provisions for meeting training and maintenance needs of the implementation of the PoA?</p> <p><i>Describe the process undertaken to assess the maintenance and training needs.</i></p>	<p><i>Description:</i> The management plan does include one function of “Household instruction” under the supervision of the provincial SREO, local REO and CME. However, there is no procedure for keeping maintenance and training records for the users and service support centers. Besides, since the current operating framework of PoA is stated as “Tentative”, a procedure shall be established on recording changes of the framework of all involved entities’ functions.</p> <p><i>Justification of evidences:</i> By means of document review.</p> <p><i>Conclusion:</i> CAR PoA-A15 was raised and correction is necessary.</p>	<p>/PDDs/ /POAR/</p>	<p>CAR PoA- A15</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
A.4.4.2. Monitoring plan	<i>The PoA general monitoring plan shall be assessed.</i>			
<p>A.4.4.2.1. If the CME does not wish to have all CPAs verified, has a description of the proposed statistically sound sampling method/procedure to be used by DOEs for verification of the CPA GHG emission reductions been provided?</p> <p>(EB 55 Annex 38, §6(k)) Please refer to “General Guidelines for Sampling and Surveys for Small-Scale CDM project Activities (Version 01)” (EB 50 Annex 30)</p> <p>The request for issuance of a PoA shall relate to all CPAs included in the PoA during the specified monitoring period. The monitoring periods shall be consecutive. A request for issuance shall relate to the certified emission reductions verified as per above. (EB55 Annex 38 §37)</p>	<p><i>Description:</i> The CME has proposed a sample number of CPAs to be verified during verification process in section A.4.4.2 of the PoA-DD; however, the statistically sound sampling method/procedure to be used by the DOEs are still not sufficiently described, esp. on the number of biogas digesters rather than the number of CPAs to be sampled. Besides, the “adjustment factor” is unclear about its impact on the total emission reduction calculations, further clarification is necessary. The “ER_{i,y,reported}” has been double stated.</p> <p><i>Justification of evidences:</i> By means of document review.</p> <p><i>Conclusion:</i> CAR PoA-A16 was raised and correction is necessary.</p>	<p>/PDDs/ /POAR/</p>	<p>CAR PoA- A16</p>	<p>Ok</p>
<p>A.4.4.2.2. In case the CME opts for a verification method that verifies each CPA, is there a transparent system defined and described in the PoA-DD that ensures:</p> <ul style="list-style-type: none"> i) no double accounting of ER occurs among all units within all CPAs, and ii) the verification status can be determined any time for each CPA? 	<p><i>Description:</i> The CME does not opts for a verification method that verifies each CPA, thus this checklist is not applicable to the PoA.</p> <p><i>Justification of evidences:</i> Checklist not applicable.</p> <p><i>Conclusion:</i> Checklist not applicable</p>	<p>-</p>	<p>-</p>	<p>-</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>Please assess the provisions made by the CME.</i>				
A.4.5. Public funding of the PoA	<i>In case of public funding this should not lead to diversion of ODA to the PoA</i>			
<p>A.4.5.1. Is there a confirmation that official development assistance has not been diverted to the implementation of the PoA in case public funding is used?</p> <p>(EB 55 Annex 38, §6(n))</p>	<p><i>Description:</i> It has been confirmed in section A.4.5 of the PoA-DD that no public funding from Annex 1 countries is provided for the proposed PoA. Thus no ODA will be diverted to the implementation of the PoA. However, it shall be further clarified with the China government subsidy sources.</p> <p><i>Justification of evidences:</i> By means of document review.</p> <p><i>Conclusion:</i> CL PoA-A12 was raised and clarification is necessary.</p>	<p>/PDDs/ /POAR/ /OM/</p>	<p>CL PoA- A12</p>	<p>Ok</p>
<p>A.4.5.2. Has it been confirmed whether there are any bilateral or multilateral fund project participants involved in the PoA, and if yes, the following information shall be provided to the DOE:</p> <ul style="list-style-type: none"> • Full official name of the entity fund; • Name of company managing the fund; • Party(ies) authorizing participation of the Fund; • DNA approval of voluntary participation in the PoA and confirmation that it has ratified the Kyoto Protocol; • DNA authorization of the fund to the project participant (can be combined with the approval document) (EB 55 Annex 1, § 100 (b)) <p><i>Multilateral funds do not necessarily require written approval from each participant's DNA. However those not providing a</i></p>	<p><i>Description:</i> It has not been confirmed yet whether there is any bilateral or multilateral fund involved in the PoA.</p> <p><i>Justification of evidences:</i> By means of document review.</p> <p><i>Conclusion:</i> CL PoA-A12 was raised and clarification is necessary.</p>	<p>/PDDs/ /POAR/ /OM/</p>	<p>CL PoA- A12</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>written approval may be giving up some of their rights and privileges in terms of being a Party involved in the project. (Glossary of CDM terms (version 5))</i>				
B. Duration of the PoA				
B.1. Starting Date of the PoA	<i>The starting date shall be assessed</i>			
B.1.1. What is the starting date of the PoA? Is it reasonable? <i>The crediting period of the PoA should be renewed every seven years (every 20 years for A/R PoA) from the start date of the lifetime of the PoA. Life time of the PoA starts on the date specified in the PoA-DD section B.1 or on the date of registration, whichever is later. In case of small-scale PoA, the start date must be stated as at least 4 weeks after the estimated submission date; In case of large-scale PoA, the start date must be stated as at least 8 weeks after the estimated submission date. (PoA registration uploading requirements step 4)</i>	<i>Description:</i> As per PoA requesting registration uploading step 4, the start date of a small-scale Po, must be stated as at least 4 weeks after the estimated submission date, on the date of registration, thus the stated “25/10/2010” is not reasonable as the PoA starting date. Please specify a reasonable date accordingly. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CAR PoA-B1 was raised and correction is necessary.	/PDDs/ /unfccc/ /POAR/	CAR PoA-B1	Ok
B.2. Length of the PoA	<i>The length of the PoA shall be assessed</i>			
B.2.1. What is the length/lifetime of the PoA? Is it reasonable? <i>PoA duration should not exceeding 28 years (60 years for</i>	<i>Description:</i> The length of the PoA is stated in section B.2 of the PoA-DD as 28 years which is in accordance with the PoA Procedures (EB55 Annex 38) para 6 (h) “Starting date and length of	/PDDs/ /POAR/	OK	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>A/R) (EB 55 Annex 38, §6(h) and 7(d))</i>	the PoA not exceeding 28 years (60 years for A/R)". <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> The length of the PoA is deemed reasonable.			
C. Environmental Analysis				
C.1. Level of Environmental Analysis				
C.1.1. Has it been clearly indicated on which level i.e. PoA level or CPA level, an environmental analysis has been carried out or will be carried out? (EB 55 Annex 38 § 6(l)) <i>Please check whether the indication is in line with the provided documentation.</i>	<i>Description:</i> It is not clearly indicated in section C.1 of the PoA-DD on which level the environmental analysis will be conducted, esp. the inconsistency between the first and last sentence of the 1 st paragraph. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CL PoA-C1 was raised and clarification is necessary.	/PDDs/ /POAR/	CL PoA- C1	Ok
C.1.2. Has a justification sufficiently described in section C.1 of the PoA-DD on the choice of level at which the environmental analysis is undertaken? (EB 55 Annex 38 § 6(l))	<i>Description:</i> There is also no justification on whether the level chosen is representative and reasonable. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CL PoA-C1 was raised and clarification is necessary.	/PDDs/ /POAR/	CL PoA- C1	Ok
C.2. Documentation on the analysis of the environmental impacts				
C.2.1. Has an environmental analysis of the PoA as per requirements of the CDM	<i>Description:</i> An environmental analysis of the PoA has been described in section C.2 of the PoA-DD; however, the documentation on environmental analysis carried out by the SREO	/PDDs/ /POAR/	CL PoA-	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
modalities and procedures been undertaken and described in the POA-DD? (EB 55 Annex 38, §6(l)) <i>If this analysis is not undertaken for the PoA but is to be done at the CPA level this shall be described and reflected in the CDM-POA-DD and the CDM-CPA-DD</i>	shall be submitted to DOE for crosschecking. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CL PoA-C1 was raised and clarification is necessary.		C1	
C.2.2. Are transboundary environmental impacts considered in the analysis? (EB 55 Annex 1, §§ 131 – 133) <i>Check the documents and local official sources / expertise regarding transboundary environmental impacts.</i>	<i>Description:</i> The description in section C.2 of the PoA-DD did not include transboundary impacts. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CL PoA-C1 was raised and clarification is necessary.	/PDDs/ /POAR/	CL PoA- C1	Ok
C.3. Environmental impact Analysis Requirements	<i>It shall be assessed whether host Party laws / regulations require an EIA for a typical CPA</i>			
C.3.1. Are there any Host Party laws/ regulations require for an Environmental Impact Assessment (EIA) for a typical CPA that will be included in the PoA? (EB 55 Annex 1, § 136 (d)) <i>Check the relevant national environmental legislation.</i>	<i>Description:</i> The description in section C.3 of the PoA-DD is unclear, esp. the first sentence. Besides, evidence shall be provided that an EIA is not required by the government for the PoA and each CPA. <i>Justification of evidences:</i> By means of document review and background research. <i>Conclusion:</i> CL PoA-C1 was raised and clarification is necessary.	/PDDs/ /POAR/	CL PoA- C1	Ok
C.3.2. In case an Environmental Impact Assessment (EIA) is requested by the host party, has it been appropriately carried out and	<i>Description:</i> The description in section C.3 of the PoA-DD is unclear, esp. the first sentence. Besides, evidence shall be provided that an EIA is not required by the government for the PoA	/PDDs/ /POAR/	CL PoA- C1	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
if applicable duly approved? (EB 55 Annex 1, §§ 131 – 133) <i>Check the EIA and its approval, if applicable.</i>	and each CPA. <i>Justification of evidences:</i> By means of document review and background research. <i>Conclusion:</i> CL PoA-C1 was raised and clarification is necessary.			
D. Stakeholders' comments				
D.1. Level of Local Stakeholder comments	<i>The analysis shall be carried out either on PoA or CPA level</i>			
D.1.1. Has it been clearly indicated on which level i.e. PoA level or CPA level, local stakeholder comments have been or will be invited? (EB 55 Annex 1, §§ 127– 129) <i>Please check whether the indication is in line with the provided documentation.</i>	<i>Description:</i> It has been clearly indicated that the local stakeholder consultation is done at the PoA level in section D.1 of the PoA-DD. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> No deviation is identified from the PoA-DD.	/PDDs/ /POAR/	OK	Ok
D.1.2. Has a justification sufficiently described in section D.1 of the PoA-DD on the choice of level at which the local consultation is conducted? (EB 55 Annex 38 § 6(m))	<i>Description:</i> The justification on why the local stakeholder consultation is done at PoA level and whether it is representative to all users and stakeholders that will be influenced by the PoA is not sufficiently described in section D.1 of the PoA-DD. <i>Justification of evidences:</i> By means of document review. <i>Conclusion:</i> CL PoA-D1 was raised and clarification is necessary.	/PDDs/ /POAR/	CL PoA- D1	Ok
D.1.3. Does the PoA-DD include provisions in case a stakeholder consultation process is required by regulations/laws in the host country, and if so, to ensure that the	<i>Description:</i> The PoA-DD does not include description on whether a stakeholder consultation process is required by regulations/laws in the host country with sufficient evidences. <i>Justification of evidences:</i> By means of document review.	/PDDs/ /POAR/	CL PoA- D1	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
stakeholder consultation process is carried out in accordance with such regulations/ laws? (EB55 Annex38 § 6(m) &7(g) EB55 Annex1 § 128)	<i>Conclusion:</i> CL PoA-D1 was raised and clarification is necessary.			
D.2. Brief description how comments by local stakeholders have been invited and compiled.	<i>The description shall be assessed.</i>			
D.2.1. With regard to the PoA, how have local stakeholders' comments been invited prior to the publication of the PDDs and compiled? (EB 55 Annex 38, §6(m); EB 55 Annex 1, §§128– 130) <i>If such comments are to be sought at the CPA level this shall be described and reflected in the POA-DD and the CPA-DD.</i> <i>Check by means of document review and interviews with local stakeholders if and when a local stakeholder consultation process has been carried out, and whether comments by local stakeholders that can reasonably be considered relevant for the proposed CDM project activity, have been invited.</i>	<i>Description:</i> The local stakeholder consultation was stated as being conducted on 19/10/2010, which was before the PoA was published for global stakeholder consultation on 28/10/2010. In section D.2 of the PoA-DD, a description is given regarding how the stakeholders are invited and comments are compiled. However, it has not indicated the type of “delegates of all City and County level Rural Energy Offices of the initial targeted 11 cities”, whether they are representative for all potential users and local stakeholders who may be influenced by the PoA, thus further clarification is necessary. Furthermore, records of the stakeholder meeting incl. the questionnaire mentioned shall be submitted to DOE. <i>Justification of evidences:</i> By means of document review, onsite interview with local households and local REO staff. <i>Conclusion:</i> CL PoA-D1 was raised and clarification is necessary.	/PDDs/ /POAR/ /OM/ /IM02/ /IM03/	CL PoA- D1	Ok
D.3. Summary of the comments received	<i>The description shall be assessed.</i>			
D.3.1. With regard to the PoA, can the summary provided assessed as adequate and	<i>Description:</i> The records of the stakeholder meeting incl. the questionnaire mentioned shall be submitted to DOE for crosschecking.	/PDDs/ /POAR/	CL PoA-	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
complete? (EB 55 Annex 1, §§ 128– 130)	<i>Justification of evidences:</i> By means of document review, onsite interview with local households and local REO staff. <i>Conclusion:</i> CL PoA-D1 was raised and clarification is necessary.	/OM/	D1	
D.4. Report on how due account was taken of comments received	<i>The description shall be assessed.</i>			
D.4.1. With regard to the PoA, has adequate due account been taken of comments received if any? (EB 55 Annex 1, §§ 128– 130)	<i>Description:</i> The records of the stakeholder meeting incl. the questionnaire mentioned shall be submitted to DOE for crosschecking. Besides, during global stakeholder consultation period, a comment has been received for this PoA as follows: “... that the funding for each province is decided in Beijing for a 5 five years period without any link to the registration of CDM project in the province. Therefore the amount of public money available for one province during each five years period with/without the CDM project is the same. The grant under government program is 1500 RMB in Sichuan (see PoADD documentation), the grant from government under PoA0059 is also 1500 RMB. Thus the number of biodigesters built in Sichuan will be the same with or without the PoA0059.” This comment shall taken into due account by the PP with sufficient clarifications on the additionality. <i>Justification of evidences:</i> By means of document review, onsite interview with local households and local REO staff. <i>Conclusion:</i> CL PoA-D1 was raised and clarification is necessary.	/PDDs/ /POAR/ /OM/ /GSPC/	CL PoA- D1	Ok
E. Application of a Baseline and Monitoring				

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
Methodology				
E.1. Title and reference of the applied methodology				
<p>E.1.1. Does the PoA apply (an) approved, applicable and valid version of CDM methodology(ies) identical on the UNFCCC website? (EB 51 Annex 1, §65, 71) <i>The methodology should be approved by the EB for use in a PoA. Describe the steps to determine whether the methodology is correctly quoted and applied by comparing it with the actual text of the applicable version of the methodology available on the UNFCCC CDM website.</i></p>	<p><i>Description:</i> The PoA is applying a combination of two small scale methodologies: AMS I.C - <i>Thermal energy for the user with or without electricity</i> (version 18); AMS III.R– <i>Methane recovery in agricultural activities at household/small farm level</i> (version 1). Both are approved, applicable and of whose versions are valid and identical on the UNFCCC website: http://cdm.unfccc.int/methodologies/SSCmethodologies/approved Besides, the combination of these two methodologies has been approved by EB meeting 53 report paragraph 51. <i>Justification of evidences:</i> By means of document review and visit of UNFCCC website. <i>Conclusion:</i> No identical mistakes are found. However CAR PoA-E1 has been raised.</p>	<p>/PDDs/ /AMS.I.C/ /AMS.III.R/ /unfccc/</p>	<p>CAR PoA- E1</p>	<p>Ok</p>
E.2. Justification of the methodology choice and its applicability to a CPA				
<p>E.2.1. Does a typical CPA apply a combination of approved methodologies? If so, has such combination been approved in accordance with</p>	<p><i>Description:</i> The PoA is applying a combination of two small scale methodologies: AMS I.C - <i>Thermal energy for the user with or without electricity</i></p>	<p>/PDDs/ /AMS.I.C/</p>	<p>OK</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>“Procedures for approval of the application of multiple methodologies to a programme of activities”?</p> <p>(EB 55 Annex 38, §6(f))</p> <p><i>If a combination of approved methodologies is being applied this combination must be applied to all CPAs and must be applied in a consistent manner.</i></p>	<p>(version 18);</p> <p>AMS III.R– <i>Methane recovery in agricultural activities at household/small farm level</i> (version1).</p> <p>Both are approved, applicable and of whose versions are valid and identical on the UNFCCC website: http://cdm.unfccc.int/methodologies/SSCmethodologies/approved</p> <p>Besides, the combination of these two methodologies has been approved by EB 53 meeting report paragraph 51.</p> <p><i>Justification of evidences:</i> By means of document review and visit of UNFCCC website.</p> <p><i>Conclusion:</i> No identical mistakes are found.</p>	<p>/AMS.III. R/ /unfccc/</p>		
<p>E.2.2. Is the justification of the choice of the approved baseline and monitoring methodology(ies) for the typical CPA sufficient?</p> <p>(EB 55 Annex 38, §6(f))</p>	<p><i>Description:</i> The PoA-DD provides an assessment of each applicability criterion of the applied methodologies</p> <p>AMS I.C - <i>Thermal energy for the user with or without electricity</i> (version 18);</p> <p>AMS III.R– <i>Methane recovery in agricultural activities at household/small farm level</i> (version 1).</p> <p><i>Justification of evidences:</i> The validation team has assessed through on-site visit, interview and document check that the project fulfils all related methodology applicability requirements as follows:</p> <p>For AMS I.C:</p> <ol style="list-style-type: none"> <i>This category comprises renewable energy technologies that supply users with thermal energy that displaces fossil fuel use. These units include technologies such as solar thermal water heaters and dryers, solar cookers, energy derived from renewable biomass and other technologies</i> 	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/ /XLS/ /IM01/ /IM02/ /unfccc/</p>	<p>CAR PeA- E2</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	<p><i>that provide thermal energy that displaces fossil fuel.</i></p> <p>2. <i>The total installed/rated thermal energy generation capacity of the project equipment is equal to or less than 45 MW thermal.</i></p> <p>For AMS III.R:</p> <p>3. <i>This project category comprises recovery and destruction of methane from manure and wastes from agricultural activities that would be decaying anaerobically emitting methane to the atmosphere in the absence of the project activity. Methane emissions are prevented by:</i></p> <p><i>(a) Installing methane recovery and combustion system to an existing source of methane emissions, or</i></p> <p><i>(b) Changing the management practice of a biogenic waste or raw material in order to achieve the controlled anaerobic digestion equipped with methane recovery and combustion system.</i></p> <p>4. <i>The category is limited to measures at individual households or small farms (e.g. Installation of a domestic biogas digester). Methane recovery systems that achieve an annual emission reduction of less than or equal to 5 tonnes of CO₂e per system are included in this category. Systems with annual emission reduction higher than 5 tonnes of CO₂e are eligible under AMS III.D.</i></p> <p>5. <i>This project category is only applicable in combination with AMS I.C.</i></p> <p>6. <i>The project activity shall satisfy the following conditions:</i></p> <p><i>(a) The sludge must be handled aerobically. In case of soil</i></p>			

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	<p><i>application of the final sludge the proper conditions and procedures that ensure that there are no methane emissions must be ensured.</i></p> <p><i>(b) Measures shall be used (e.g. combusted or burnt in a biogas burner for cooking needs) to ensure that all the methane collected by the recovery system is destroyed.</i></p> <p><i>7. Aggregated annual emission reductions of all systems included shall be less than or equal to 60 kt CO₂ equivalent.</i></p> <p><i>Conclusion:</i> The choice of applicability criteria as per applied methodologies is sufficient as all related criteria as per methodologies are applied, the project activity does not install co-generation or co-fired systems, nor generate or feed electricity to the grid, the project activity uses the biogas to produce heat for cooking or heating at the household and heat produced as well as generated biogas is not delivered to other facilities inside or outside the project boundary. This is substantiated as the digester is built directly at the house (below the stable). Further the design, construction and gas utilization (type and users) as stated could be confirmed by site visit. Further the project activity does not seek to retrofit or modify existing facilities involve charcoal based biomass nor solid biomass fuel (e.g. briquette). However CAR PoA-E2 was raised.</p>			
<p>E.2.3. Can all applicability criteria in the methodology, the applied tools or any other methodology component referred to therein be sufficiently fulfilled by a typical CPA?</p>	<p><i>Description & Conclusion:</i> Applicability criteria as per applied methodologies are provided, see also point E.2.2 before. As well as related eligibility criteria have been established. However PDD does not provide justification how these criteria will and can be met and by which supporting documents. Therefore CAR PoA-E3 has been raised.</p>	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/</p>	<p>CAR PoA- E3</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
(EB 55 Annex 1, §§66 (a), 66 (b), 68, 70, 75) <i>Describe for <u>each</u> applicability criterion listed in the selected approved methodology the steps taken to assess the information contained in the POA-DD.</i>	<i>Justification of evidences:</i> By means of PDDs, methodologies and onsite visit.	/XLS/ /IM01/ /IM02/		
E.2.4. Has a typical CPA been demonstrated as in accordance with all other PoA specific stipulations and requirement mentioned in the methodology and relevant tools/guidance, e.g., leakage? (EB 55 Annex 1, §70) <i>Describe the steps taken to check whether the proposed CPA meets <u>all the other PoA specific stipulations and /or limitations</u> mentioned in all sections of the approved methodology selected.</i>	<i>Description:</i> The project is in accordance to every other stipulation or requirement mentioned in all sections of AMS I.C and AMS III.R, including the baseline methodology procedure and the monitoring methodology. <i>Justification of evidences:</i> The issue was validated by checking with all other sectors in the methodology AMS I.C and AMS III.R. <i>Conclusion:</i> The project is in line with all the requirements of the methodology AMS I.C and AMS III.R.	/PDDs/ /AMS.I.C/ /AMS.III.R/	Ok	Ok
E.3. Description of the sources and gases included in the CPA boundary	<i>Project Boundaries are the limits and borders defining the GHG emission reduction in project.</i>			
E.3.1. Are the project's spatial boundaries (physical) of the CPAs to be included are clearly defined? (EB 55 Annex 1, §§67 (a), 78 - 80) <i>The PDD shall correctly describe the project boundary, including the physical delineation of the proposed CDM</i>	<i>Description:</i> The geographical sites of all individual biogas systems included in the CPA define the SSC-CPA boundary. This includes the pig barn, the biogas digester, biogas stove and the aerobic sludge application. <i>Justification of evidences:</i> By means of onsite visit, PDDs, methodologies and conducted interviews. <i>Conclusion:</i> As the project boundary includes the project equipment	/PDDs/ /AMS.I.C/ /AMS.III.R/ /IM01/	Ok	OK

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.																																	
<p><i>project activity included within the project boundary for the purpose of calculating project and baseline emissions for the proposed CDM project activity.</i></p> <p><i>Provide information on how the validation of the physical boundary has been performed either based on reviewed documented evidence or by describing what was observed/viewed during a site visit.</i></p>	<p>(digester) producing biogas, the household consuming the energy (biogas) generated and other processes affected (aerobic sludge application) by the project, the boundary is deemed clearly defined as per methodology. Besides this also covers the site of methane recovery and combustion system.</p>	<p>/IM02/ /IM03/</p>																																			
<p>E.3.2. Are all sources and GHGs included in the project boundary as required in the applied methodology?</p> <p>(EB 55 Annex 1, §§67 (a), 78 - 80)</p> <p><i>Provide information on how the validation of the GHGs and sources has been performed either based on reviewed documented evidence or by describing what was observed/viewed during a site visit.</i></p>	<p><i>Description:</i> The project activity includes two different sources of GHG emissions. These are</p> <ol style="list-style-type: none"> Methane emissions from existing manure management systems CO₂ emissions from fossil fuel consumption. <p>In detail the following GHG emissions sources and emissions are included:</p> <table border="1"> <thead> <tr> <th></th> <th>GHG emission source</th> <th>Gas</th> <th>Included?</th> <th>Explanation</th> </tr> </thead> <tbody> <tr> <td rowspan="6" style="writing-mode: vertical-rl; transform: rotate(180deg);">Baseline emissions</td> <td rowspan="3">Thermal energy used for cooking/heating by burning coal</td> <td>CO₂</td> <td>Yes</td> <td>Major source</td> </tr> <tr> <td>CH₄</td> <td>No</td> <td rowspan="2">Excluded for simplification</td> </tr> <tr> <td>N₂O</td> <td>No</td> </tr> <tr> <td rowspan="3">Thermal energy used for cooking/heating by burning other fuels</td> <td>CO₂</td> <td>No</td> <td rowspan="3">Excluded for simplification</td> </tr> <tr> <td>CH₄</td> <td>No</td> </tr> <tr> <td>N₂O</td> <td>No</td> </tr> <tr> <td rowspan="3">Existing manure management system</td> <td>CO₂</td> <td>No</td> <td rowspan="2">Excluded for simplification</td> </tr> <tr> <td>CH₄</td> <td>Yes</td> <td>Major source</td> </tr> <tr> <td>N₂O</td> <td>No</td> <td>Excluded for</td> </tr> </tbody> </table>		GHG emission source	Gas	Included?	Explanation	Baseline emissions	Thermal energy used for cooking/heating by burning coal	CO ₂	Yes	Major source	CH ₄	No	Excluded for simplification	N ₂ O	No	Thermal energy used for cooking/heating by burning other fuels	CO ₂	No	Excluded for simplification	CH ₄	No	N ₂ O	No	Existing manure management system	CO ₂	No	Excluded for simplification	CH ₄	Yes	Major source	N ₂ O	No	Excluded for	<p>/PDDs/ /AMS.I.C/ /AMS.III.R/</p>	<p>CAR PoA- E4</p>	<p>Ok</p>
	GHG emission source	Gas	Included?	Explanation																																	
Baseline emissions	Thermal energy used for cooking/heating by burning coal	CO ₂	Yes	Major source																																	
		CH ₄	No	Excluded for simplification																																	
		N ₂ O	No																																		
	Thermal energy used for cooking/heating by burning other fuels	CO ₂	No	Excluded for simplification																																	
		CH ₄	No																																		
		N ₂ O	No																																		
Existing manure management system	CO ₂	No	Excluded for simplification																																		
	CH ₄	Yes		Major source																																	
	N ₂ O	No	Excluded for																																		

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)					Ref.	Draft Concl.	Final Concl.				
	Project emissions	Thermal energy used for cooking by burning biogas	CO ₂	No	simplification Excluded as biogas is a renewable form of energy and its generation and destruction is CO ₂ neutral							
CH ₄			No	N.a.								
N ₂ O			No	N.a.								
Thermal energy used for cooking by burning coal		CO ₂	Yes	Major source								
		CH ₄	No	Excluded for simplification								
		N ₂ O	No									
Thermal energy used for cooking by burning straw and firewood		CO ₂	No	N.a.								
		CH ₄	No									
		N ₂ O	No									
Leakage from biogas digester		CO ₂	No	Excluded as decomposition of organic waste is CO ₂ neutral								
		CH ₄	Yes	10% leakage as per AMS III.R								
		N ₂ O	No	N.a.								
<p><i>Justification of evidences:</i> By means of PDDs, methodologies, onsite visit, conducted interviews and document check.</p> <p><i>Conclusion:</i> CAR PoA-E4 has been raised.</p>												
E.3.3. In case the methodology allows to		<i>Description:</i> The methodology AMS III.R does not include such							/PDDs/	CAR	Ok	

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>choose whether a source and/or gas is to be included, is the choice sufficiently explained and justified?</p> <p>(EB 55 Annex 1, §§67 (a), 78 - 80)</p> <p><i>Confirm if the justification provided by the PPs is reasonable, based on assessment of supporting documented evidence provided by the PPs or by onsite observations.</i></p>	<p>choice. Methodology AMS I.C does not allow choosing between different GHG emissions but offers choices for different emission sources (see point E.3.2. before).</p> <p><i>Justification of evidences:</i> By means of PDD and methodologies.</p> <p><i>Conclusion:</i> Even though two different GHG gases, CO₂ and CH₄, CO₂ emissions are covered by AMS I.C and CH₄ emissions by AMS III.R. Each of the two methodologies does not allow choosing within itself. This is substantiated as AMS III.R under §3 is only applicable in combination with AMS I.C. However there is choice for different sources w.r.t. baseline and/or project emissions and CAR PoA-E4 has been raised due to this.</p>	<p>/AMS.I.C/ /AMS.III.R/</p>	<p>PoA-E4</p>	
<p>E.3.4. Are provisions in place for the case that a CPA implementation might lead to GHG emissions within the project boundary which are expected to contribute more than 1% of the overall expected average annual emission reductions, which are not addressed by the methodology?</p> <p>(EB 55 Annex 1, §77)</p>	<p><i>Description:</i> A typical CPA under the PoA is the installation of a biogas digester. Methane is generated by biodegradation of organic matter which is used for cooking and heating. By this fossil fuel utilization is substituted. Physical methane leakage from digester is covered and AMS I.C §43 even covers any other significant emissions associated with the project activity as project emissions.</p> <p><i>Justification of evidences:</i> By means of PDD and methodologies as well as onsite visit and conducted interviews.</p> <p><i>Conclusion:</i> Methodologies applied have addressed the issue of emissions very comprehensively. However CAR PoA-A10 has been raised especially points i to iv. Besides eligibility criteria should be updated to ensure no replacement of equipment from other sites and information on electricity consumption for operation of project equipment.</p>	<p>/PDDs/ /AMS.I.C/ /AMS.III.R/ /IM01/ /IM02/</p>	<p>CAR PoA-A10</p>	<p>Ok</p>
<p>E.4. Description of how the baseline scenario is identified and description of</p>	<p><i>The choice of the baseline scenario will be validated with focus on whether the baseline is a likely scenario, and whether the methodology to define the baseline scenario has been followed in a</i></p>			

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
baseline scenario	<i>complete and transparent manner.</i>			
<p>E.4.1. What possible baseline scenarios have been considered for all CPAs and are they complete according to the methodology? Does the list of alternatives contain the status-quo situation, the project not undertaken as a CDM project as well as all other viable means of supplying the outputs or services that are to be supplied by the proposed CDM project activity?</p> <p>(EB 55 Annex 1, §§ 67 (b), 82, §§ 104 – 106)</p> <p><i>Fill in all alternatives in table A-2.</i></p> <p><i>Describe how it was validated that all alternatives are plausible and no plausible alternative is excluded from the consideration.</i></p>	<p><i>Description:</i> The baseline scenarios for each of the two GHG gases CO₂ and methane are predefined and given by the corresponding methodology. According to AMS I.C the baseline scenario for CO₂ emissions is as following:</p> <p><i>For renewable energy technologies that displace technologies using fossil fuels, the simplified baseline is the fuel consumption of the technologies that would have been used in the absence of the project activity times an emission factor for the fossil fuel displaced. For calculating the emission factor, reliable local or national data shall be used. IPCC default values shall be used only when country or project specific data are not available or demonstrably difficult to obtain.</i></p> <p>According to AMS III.R the baseline scenario for methane emissions is as following:</p> <p><i>The baseline scenario is the situation where, in the absence of the project activity, biomass and other organic matter are left to decay anaerobically within the project boundary and methane is emitted to the atmosphere. Baseline emissions (BE_y) are calculated ex ante using the amount of the waste or raw material that would decay anaerobically in the absence of the project activity, with the most recent IPCC tier 2 approach (please refer to the chapter ‘Emissions from Livestock and Manure Management’ under the volume ‘Agriculture, Forestry and other Land use’ of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories). Country/regional-specific values shall be used if available.</i></p> <p><i>Justification of evidences:</i> By means of PDDs and methodologies.</p>	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/</p>	<p>Ok</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	<p><i>Conclusion:</i></p> <p><input checked="" type="checkbox"/> All plausible alternative scenarios listed in the approved methodology have been considered, incl. the status-quo situation and the project not undertaken as a CDM project. In the course of document review and site visit, it has been validated that all other alternatives which supply comparable outputs and / or services have been taken into consideration. Thus no plausible scenario has been omitted.</p> <p><input type="checkbox"/> The following alternative scenarios/options have been omitted, Corresponding CAR/CL PoA-xx has been raised:</p>			
<p>E.4.2. Have the baseline alternatives sufficiently taken into account relevant national and/or sectoral policies, macro-economic trends and political aspirations?</p> <p>(EB55 Annex 1, §§ 85, 87(d); EB55 Annex 38, § 6(b)) <i>Describe whether the PP has shown that all relevant policies and circumstances have been identified and correctly considered in the PDD in accordance with the guidance by the Board. Pl. consider the guidance EB 22 annex 3 (regarding E+ and E- policies).</i></p>	<p><i>Description:</i> see point E.4.1. above.</p> <p><i>Justification of evidences:</i></p> <p><i>Conclusion:</i></p>	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/</p>	<p>Ok</p>	<p>Ok</p>
<p>E.4.3. Are the provisions for the baseline scenario determination compatible with the available data and are all literature and sources clearly referenced?</p> <p>(EB 55 Annex 1, § 92(a)) <i>Describe whether the documents and sources referred to in</i></p>	<p><i>Description:</i> Yes the baseline scenario determination is compatible with the available data.</p> <p><i>Justification of evidences:</i> By means of PDD, methodologies and document check.</p> <p><i>Conclusion:</i> CAR PoA E5 has been raised as all the corresponding literature and sources of information are not referenced in the PDD.</p>	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/ /BS/</p>	<p>CAR PoA-E5 CAR PoA-E6</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<i>the PDD are correctly quoted and clearly referenced.</i>	CAR PoA E6 has been raised as section E.6.1 references to further baseline paragraphs as per AMS-I.C.			
<p>E.4.4. What has been identified as the baseline scenario? Has the baseline scenario been determined using conservative assumptions where possible, including relevant references and sources</p> <p>(EB 55 Annex 1, §§80-91)</p> <p><i>Describe the chosen BL scenario, taking into consideration the technology that would be employed and / or the activities that would take place in the absence of the proposed CDM project activity.</i></p> <p><i>Describe whether the choice of the identified baseline scenario is reasonable by validating the <u>key assumptions, calculations and rationales</u> used in the POA-DD. Describe whether these are listed, relevant and <u>conservatively interpreted</u> in the POA-DD.</i></p>	<p><i>Description:</i> Please refer to point E.4.2 above. The baseline is predefined in the corresponding methodologies.</p> <p><i>Justification of evidences:</i></p> <p><i>Conclusion:</i></p> <p><input checked="" type="checkbox"/> The baseline scenario is reasonable and has been determined using conservative assumptions where possible. Please refer to comments in table A-2.</p> <p><input type="checkbox"/> The following CARs / CLs have been issued because assumptions used in the baseline determination have been assessed to be not conservative</p> <p>1.</p>	/PDDs/ /AMS.I.C/ /AMS.III. R/	Ok	Ok
<p>E.5. CPA additionality</p>	<p><i>The description shall be assessed</i></p>			
<p>E.5.1. Assessment and demonstration of CPA additionality</p>	<p><i>The provisions for CPA additionality assessment shall be checked</i></p>			
<p>E.5.1.1. Does the POA-DD include provision that a typical CPA starting date will be defined in accordance with the CDM glossary of terms and substantiated with reliable evidences?</p>	<p><i>Description:</i> PoA-DD does not provide any information on prior consideration of CDM e.g. key events of project development and realization. Besides supporting document has been provided that shall be provided that host country DNA and UNFCCC is informed of the intention of this PoA to seek CDM status within 6 months of project starting date.</p>	/PDDs/ /unfccc/ /PC/	CAR PoA A10 CAR	Ok

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<p>(EB 55 Annex 1, §101)</p> <p><i>Describe the evidence assessed regarding the prior consideration of the CDM (if necessary). Describe whether the evidence to support such consideration is adequately and transparently described in the POA-DD.</i></p>	<p><i>Justification of evidences:</i> By means of PoA-DD and unfccc webpage</p> <p><i>Conclusion:</i> CAR PoA-A10 and E7 have been raised according to description.</p>		POA-E7	
<p>E.5.1.2. What is the starting date of the 1st CPA indicated in the real case CPA-DD section A.4.2.1? Is it after the commencement of validation of the PoA, i.e., the date on which the PDDs are first published for global stakeholder consultations?</p> <p>(EB55 Annex 38 §7(d))</p>	<p><i>Description:</i> The starting indicated in section A.4.2.1 of the 1st CPA is 01/07/2011 which is after the date of commencement of validation of the PoA on 28/10/2010.</p> <p><i>Justification of evidences:</i> By means of PDDs and unfccc webpage</p> <p><i>Conclusion:</i> The starting date is after commencement of validation of the PoA, however CAR PoA-A10 has been raised.</p>	<p>/PDDs/ /unfccc/</p>	CAR PoA-A10	<p>Ok</p>
<p>E.5.1.3. Does the PoA-DD make provisions to describe the additionality justification, which follows the requirements of the applied methodology and/or other methodological tools?</p> <p>(EB 55 Annex 1, §§67 (d), 94)</p> <p><i>Describe how it is validated that additionality justification is carried out in accordance with the applied methodology and/or applied methodological tools. Further focus your assessment on the reliability and credibility of data, rationales and assumptions, justifications and documentations provided by the PP.</i></p>	<p><i>Description:</i> The PoA-DD demonstrates the additionality of the project using the following barriers: - Due to financial barriers resulted from insufficient funds/equity available by farmers - Due to technological barrier.</p> <p><i>Justification of evidences:</i> AMS I.C. (version 18) and AMS III.R. (version 01) are small scale project methodologies and do not provide special requirements for additionality. Thus the general analysis of additionality as set out in attachment A to appendix B of the simplified modalities and procedures as barrier analysis should be conducted. The PP has referenced in PoA-DD to the attachment A to appendix B but the procedure of demonstration of additionality is not in line with the stated appendix. During onsite visit and conducted interviews, the validation team</p>	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/</p>	CAR PoA-E8	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	<p>assessed that the technological barrier is not sufficiently substantiated. Further the financial barrier was not sufficiently proved by financial conditions and a NPV/simple cost/ROI analysis is demanded to further elaborate financial barrier.</p> <p><i>Conclusion:</i> The complete section of additionality should be revised according to EB 55 Annex 38 and Attachment A to Appendix B. Hence CAR PoA-E8 has been raised.</p>			
<p>E.5.1.4. Is an appropriate analysis method chosen for the project (simple cost analysis, investment comparison analysis or benchmark analysis)?</p> <p>(EB 55 Annex 1, §109) <i>Describe why the selected analysis method is appropriate under consideration of potential revenues and costs, potential project alternatives and potential available benchmark values.</i></p>	<p><i>Description:</i> The project applies a benchmark analysis to demonstrate additionality. <i>Justification of evidences:</i> By means of PDDs and financial guidance</p> <p><i>Conclusion:</i> The complete section of additionality should be revised according to EB 55 Annex 38 and Attachment A to Appendix B. Hence CAR PoA-E8 has been raised.</p>	<p>/PDDs/ /FG/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>
<p>E.5.1.5. Is a clear, viewable and unprotected Excel spreadsheet template available for the investment calculation, if applicable?</p> <p>(EB 55 Annex 1, §110) <i>Describe the steps taken to validate this issue.</i></p>	<p><i>Description:</i> At time of onsite validation no financial calculation has been provided. <i>Justification of evidences:</i> By means of PDD and onsite visit</p> <p><i>Conclusion:</i> As no financial calculation has been provided at time of onsite validation CAR PoA-E8 has been raised.</p>	<p>/PDDs/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>
<p>E.5.1.6. If applicable, were the input values used</p>	<p><i>Description:</i> see point E.5.1.5. above <i>Justification of evidences:</i></p>	<p>/PDDs/</p>	<p>CAR</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>in the investment analysis valid and applicable at the time of the investment decision with sufficient evidences?</p> <p>(EB 55 Annex 1, §111; EB 51 Annex 58)</p> <p><i>In case the basis for input values is a Feasibility Study Report (FSR) describe how it shall be ensured that the period in time between the finalisation of the FSR and the investment decision is sufficiently short so that it is unlikely that input values would have materially changed.</i></p> <p><i>Please fill out Annex 3 of this report for detailed assessment.</i></p>	<p><i>Conclusion:</i></p>	<p>/FG/</p>	<p>PoA-E8</p>	
<p>E.5.1.7. If applicable, does the period chosen for the investment analysis, reflect the technical lifetime of the proposed CPA or in case a shorter period is chosen, is the fair value of the project activity's assets at the end of the investment analysis period (as a cash inflow) included?</p> <p>(EB 55 Annex 1, §111; EB 51 Annex 58)</p> <p><i>Describe how the technical lifetime / period chosen for calculating financial parameter(s) is reviewed and which documents shall be utilised in the course of review. Describe furthermore the approach used to check the inclusion of a potential fair value.</i></p>	<p><i>Description:</i> The investment analysis is based on the investment horizon of 10 years as per PDD.</p> <p><i>Justification of evidences:</i> By means of PDDs.</p> <p><i>Conclusion:</i> CAR PoA-E8 has been raised on the appropriateness of a 10-year investment horizon.</p>	<p>/PDDs/</p>	<p>CAR PoA-E8</p>	<p>Ok</p>
<p>E.5.1.8. If applicable, has the fair value calculation included book value and expected potential profit or loss, and in accordance with</p>	<p><i>Description:</i> see point E.5.1.5. above</p> <p><i>Justification of evidences:</i></p> <p><i>Conclusion:</i></p>	<p>/PDDs/</p>	<p>CAR PoA-E8</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>local accounting regulations (where available) or international best practice?</p> <p>(EB 55 Annex 1, §111; EB 51 Annex 58) <i>State the accounting regulations applied for calculating the fair value and describe why these are applicable under the project specific circumstances. Describe potential mismatches between regulations and the approach applied for calculating the fair value.</i></p>				
<p>E.5.1.9. If applicable, is the book value as well as the expectation of the potential profit or loss included in the fair value calculation?</p> <p>(EB 55 Annex 1, §111; EB 51 Annex 58))</p>	<p><i>Description:</i> see point E.5.1.5. above <i>Justification of evidences:</i> <i>Conclusion:</i></p>	<p>/PDDs/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>
<p>E.5.1.10. If applicable, are depreciation and other non-cash related items added back to net profits for the purpose to calculate the financial indicator?</p> <p>(EB 55 Annex 1, §111; EB 51 Annex 58)</p>	<p><i>Description:</i> see point E.5.1.5. above. <i>Justification of evidences:</i> <i>Conclusion:</i></p>	<p>/PDDs/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>
<p>E.5.1.11. If applicable, is taxation excluded in the investment analysis or is the benchmark intended for post tax comparisons?</p> <p>(EB 55 Annex 1, §111; EB 51 Annex 58)</p>	<p><i>Description:</i> An equity IRR is calculated and a benchmark of 9% is applied. <i>Justification of evidences:</i> By means of PDDs and financial guidance. <i>Conclusion:</i> CAR PoA-E8 has been raised to clarify whether the equity IRR provided is calculated pre-tax or post tax and that the benchmark applied is applicable to the IRR calculated as well as no</p>	<p>/PDDs/ /TOOL/ /XLS/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	financial calculation has been provided at time of onsite validation.			
E.5.1.12. In case of project IRR: Are the costs of financing expenditures (loan repayments and interests) excluded from the calculation of project IRR? (EB 55 Annex 1, §111; EB 51 Annex 58)	<i>Description:</i> n.a. as an equity IRR is calculated. <i>Justification of evidences:</i> By means of PDDs. <i>Conclusion:</i> This point is ok.	/PDDs/	Ok	Ok
E.5.1.13. In case of equity IRR: Is the part of the investment costs, which is financed by equity considered as net cash outflow and is the part financed by debt excluded in net cash outflow? (EB 55 Annex 1, §111; EB 51 Annex 58)	<i>Description:</i> see point E.5.1.5. <i>Justification of evidences:</i> By means of PDDs <i>Conclusion:</i> No financial calculation has been provided therefore CAR PoA-E8 has been raised.	/PDDs/	CAR PoA-E8	Ok
E.5.1.14. If applicable, is the type of benchmark chosen appropriate for the type of IRR calculated (e.g. local commercial lending rates or weighted average costs of capital for project IRR; required/expected returns on equity for equity IRR)? (EB 55 Annex 1, §111; EB 51 Annex 58) <i>In case risk premiums are applied describe its suitability to reflect the risks associated with the project activity.</i>	<i>Description:</i> Benchmark of 9% is applied and equity IRR is calculated. <i>Justification of evidences:</i> By means of PDD and financial guidance. <i>Conclusion:</i> CAR PoA-E8 has been raised due to the reason as it is not specified that the type of benchmark applied is applicable to the type of IRR calculated as well as no financial calculation has been provided at time of onsite validation.	/PDDs/ /TA/	CAR PoA-E8	Ok
E.5.1.15. If applicable, is the benchmark value suitable for the project activity, e.g., it has been	<i>Description:</i> see point E.5.1.14. above <i>Justification of evidences:</i>	/PDDs/	CAR PoA-	Ok

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>consistently used in the past for similar projects with similar risks, and is it reasonable to assume that no investment would be made at a rate of a lower return than the benchmark?</p> <p>(EB 55 Annex 1, §111-112; EB 51 Annex 58) <i>Describe whether it is reasonable to assume that a lower rate of return would consequently result in the baseline scenario.</i></p>	<p><i>Conclusion:</i></p>	<p>/TA/</p>	<p>E8</p>	
<p>E.5.1.16. If applicable, is it ensured that the project cannot be developed by other developers than the PP?</p> <p>(EB 55 Annex 1, §111; EB 51 Annex 58)</p>	<p><i>Description:</i> The project activity is the installation of biogas digesters at rural households.</p> <p><i>Justification of evidences:</i> By means of PDD and onsite visit and conducted interviews.</p> <p><i>Conclusion:</i> As the digester is or will be installed directly next or under the pig barn this point is deemed ok.</p>	<p>/PDDs/ /IM01/ /IM02/ /IM03/</p>	<p>Ok</p>	<p>Ok</p>
<p>E.5.1.17. In case of financial additionality justification; has a sensitivity analysis been considered and does the same contain variation of parameters that constitute more than 20% of either total project costs or total project revenues and may vary throughout the project lifetime?</p> <p>(EB 55 Annex 1, §§110, 111 (e); EB 51 Annex 58) <i>Describe relevance of parameters used in the sensitivity analysis as well as their likeliness to vary during the project's lifetime. Parameters which are fixed on the basis of contracts, PPAs etc. may not be subject to variation and not adequate.</i></p>	<p><i>Description:</i> As per PDD a sensitivity analysis has been considered. Three parameters were selected for sensitivity analysis. Total investment, coal saving and maintenance costs. The sum of subsidy and the coal saving constitute the total revenue of the project.</p> <p><i>Justification of evidences:</i> By means of PDDs.</p> <p><i>Conclusion:</i> The complete section of additionality should be revised according to EB 55 Annex 38 and Attachment A to Appendix B. Besides no financial analysis was provided at time of onsite validation. Hence CAR PoA-E8 has been raised.</p>	<p>/PDDs/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>E.5.1.18. If applicable, have sensitivity analysis considered parameters constituting less than 20% of total project costs or revenues, which may have potential material impact on the financial parameter?</p> <p>(EB 55 Annex 1, §110; EB 51 Annex 58) <i>Describe whether those parameters are considered in the sensitivity analysis?</i></p>	<p><i>Description:</i> see point E.5.1.17. above <i>Justification of evidences:</i> <i>Conclusion:</i></p>	<p>/PDDs/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>
<p>E.5.1.19. If applicable, is the range of variation reasonable in the specific context of the project activity, taking into consideration historic trends in the business sector?</p> <p>(EB 55 Annex 1, §110; EB 51 Annex 58) <i>Describe whether the range of variation is appropriate with focus on historic developments, e.g. price of oil / labour etc., energy potential in the region in question.</i></p>	<p><i>Description:</i> A range of variation of -15% to +15% is applied. <i>Justification of evidences:</i> By means of PDDs. <i>Conclusion:</i> The complete section of additionality should be revised according to EB 55 Annex 38 and Attachment A to Appendix B. Besides no financial analysis was provided at time of onsite validation. Hence CAR PoA-E8 has been raised.</p>	<p>/PDDs/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>
<p>E.5.1.20. If applicable, are there any barriers given which have a clear and direct impact on the financial returns of the project?</p> <p>(EB 55 Annex 1, §§ 115, 137) <i>In case of LSC projects those issues cannot be considered as barriers and shall be assessed in the investment analysis. In case of SSC projects the same fundamentals as for LSC projects shall apply, i.e. the assessment of the investment barrier according to</i></p>	<p><i>Description:</i> The PoA-DD demonstrates the additionality of the project using the following barriers: - Due to financial barriers resulted from insufficient funds/equity available by farmers - Due to technological barrier. As per PDD a benchmark approach has been applied which results that the project activity is not financially attractive. Besides the following technology barriers have been stated: 1. Access to improved technologies and management methods 2. Lack of technical knowledge and experience</p>	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>

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<p><i>EB 41, Annex 45.</i></p> <p><i>Please fill out Annex 4 of this report for detailed assessment.</i></p>	<p>3. Due to the decreasing gas output of digesters when not receiving regular maintenance, farmers perceive household biogas technology as prone to failures and risky investment.</p> <p>4. Maintenance services are scarcely available and when they are, costs exceed farmers' financial means and willingness to pay.</p> <p><i>Justification of evidences:</i> AMS I.C. (version 18) and AMS III.R. (version 01) are small scale project methodologies and do not provide special requirements for additionality. Thus the general analysis of additionality as set out in attachment A to appendix B of the simplified modalities and procedures as barrier analysis should be conducted. The PP has referenced in PoA-DD to the attachment A to appendix B but the procedure of demonstration of additionality is not in line with the stated appendix.</p> <p>During onsite visit and conducted interviews, the validation team assessed that the technological barrier is not sufficiently substantiated.</p> <p>Further the financial barrier was not sufficiently proved by financial conditions and a NPV/simple cost/ROI analysis is demanded to further elaborate financial barrier.</p> <p><i>Conclusion:</i> The complete section of additionality should be revised according to EB 55 Annex 38 and Attachment A to Appendix B. Hence CAR PoA-E8 has been raised especially specification is requested w.r.t. whether these stated technological barrier is additional to increased maintenance costs (“costs exceed farmers financial means”) or reduced revenue (“due to decreasing gas output”) which could be or is already covered by the financial</p>			

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<p>E.5.1.21. If applicable, are the barriers described risk related (e.g technology failure, other performance related risks) or has the availability of sources of finance for the project been described and adequately substantiated?</p> <p>(EB 55 Annex 1, §§ 115, 137) <i>Identified barriers shall be in accordance with the attachment A to appendix B (4/CMP.1, Annex II, paragraph 28) and Guidelines for objective demonstration and assessment of barriers (EB50 Annex 13)</i></p>	<p>analysis.</p> <p><i>Description:</i> see point E.5.1.3. above <i>Justification of evidences:</i> <i>Conclusion:</i></p>	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>
<p>E.5.1.22. If applicable, has it been justified that one or a set of real barriers prevent(s) the implementation of the project activity and do not prevent the implementation of at least one of the alternatives?</p> <p>(EB 55 Annex 1, § 117 (b))</p>	<p><i>Description:</i> see point E.5.1.3. above <i>Justification of evidences:</i> <i>Conclusion:</i></p>	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>
<p>E.5.1.23. If applicable, have the established criteria justified and evidenced that the barriers given in the PoA-DD are real and appropriate?</p> <p>(EB 55 Annex 1, § 117 (a))</p>	<p><i>Description:</i> see point E.5.1.3. above <i>Justification of evidences:</i> <i>Conclusion:</i></p>	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>
<p>E.5.1.24. Is the defined region for the common</p>	<p><i>Description:</i> n.a. as small scale project activity. <i>Justification of evidences:</i></p>	<p>/PDDs/</p>	<p>Ok</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
<p>practice analysis appropriate for the technology/industry type?</p> <p>(EB 55 Annex 1, § 120) <i>Describe the why the project activity is not common practice in a transparent and unambiguous manner.</i></p>	<p><i>Conclusion:</i></p>	<p>/AMS.I.C/ /AMS.III.R/</p>		
<p>E.5.2. Key criteria for assessment and demonstration of CPA additionality</p>	<p><i>The key criteria for CPA additionality assessment shall be checked</i></p>			
<p>E.5.2.1. Does the PoA-DD provide unambiguous criteria to assess the decision taken to proceed with the CPA?</p> <p><i>Describe the steps taken to validate the assessment of the decision making.</i></p>	<p><i>Description:</i> As per PoA-DD a CPA is preceded if the key criteria as established are fulfilled. The following key criteria w.r.t. investment analysis and technological barrier have been provided in PoA-DD. The key criteria for investment analysis are:</p> <ul style="list-style-type: none"> a) The equity IRR of the digester investment for an average household is calculated based on updated input parameters and the method provided in section E.5.1. b) A suitable and applicable IRR benchmark is quantified in the CPA-DD. c) The financial additionality is demonstrated by showing that the calculated IRR (excluding CDM) is below the applied investment benchmark. <p>The established key criteria for technology barrier are:</p> <ul style="list-style-type: none"> a) The description of the kind of services that can be assessed by the farmers. b) Clear rulings on the financial contribution of the C/ME for enhancement of the technical service network. The financial contribution of the C/ME shall cover at least 10% of the carbon revenues. <p><i>Justification of evidences:</i> By means of PDDs, onsite visit conducted interviews.</p>	<p>/PDDs/ /IM01/ /IM02/ /POAR/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	<p>During onsite visit and conducted interviews, the validation team assessed that the technological barrier is not sufficiently substantiated. Further the financial barrier was not sufficiently proved by financial conditions and a NPV/simple cost/ROI analysis is demanded to further elaborate financial barrier.</p> <p><i>Conclusion:</i> The complete section of additionality should be revised according to EB 55 Annex 38 and Attachment A to Appendix B. Hence CAR PoA-E8 has been raised.</p>			
<p>E.5.2.2. Does the PoA-DD provide unambiguous criteria to assess that the project would not be the most economically or financially attractive alternative without the revenues from the sale of CERs?</p> <p>(EB 55 Annex 1, §108) <i>Discuss the appropriateness of the criteria established. Pl. consider also the eligibility criteria as discussed above. Assess whether the PP has demonstrated how these criteria would be applied to assess the additionality of a typical CPA at the time of CPA inclusion.</i></p>	<p><i>Description:</i> Key criteria w.r.t. investment analysis and technological barrier have been provided in PoA-DD. The key criteria for investment analysis are</p> <p>a) The equity IRR of the digester investment for an average household is calculated based on updated input parameters and the method provided in section E.5.1.</p> <p>b) A suitable and applicable IRR benchmark is quantified in the CPA-DD.</p> <p>c) The financial additionality is demonstrated by showing that the calculated IRR (excluding CDM) is below the applied investment benchmark.</p> <p>The established key criteria for technology barrier are:</p> <p>a) The description of the kind of services that can be assessed by the farmers.</p> <p>b) Clear rulings on the financial contribution of the C/ME for enhancement of the technical service network. The financial contribution of the C/ME shall cover at least 10% of the carbon revenues.</p>	<p>/PDDs/ /IM01/ /IM02/ /POAR/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	<p><i>Justification of evidences:</i> By means of PDDs, onsite visit conducted interviews.</p> <p>During onsite visit and conducted interviews, the validation team assessed that the technological barrier is not sufficiently substantiated.</p> <p>Further the financial barrier was not sufficiently proved by financial conditions and a NPV/simple cost/ROI analysis is demanded to further elaborate financial barrier.</p> <p>Conclusion: The complete section of additionality should be revised according to EB 55 Annex 38 and Attachment A to Appendix B. Hence CAR PoA-E8 has been raised.</p>			
<p>E.5.2.3. Does the PoA-DD provide unambiguous criteria to assess the barriers identified in section E.5.1 of the PoA-DD which will prevent the CPAs occur without the CDM incentives?</p>	<p><i>Description:</i> see point E.5.2.2. above <i>Justification of evidences:</i> <i>Conclusion:</i></p>	<p>/PDDs/ /IM01/ /IM02/ /POAR/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>
<p>E.5.2.4. In case similar projects will be identified, are there any unambiguous criteria to assess the key differences between the proposed project and existing or ongoing projects and what kind of difference has been observed? (EB 55 Annex 1, § 120)</p>	<p><i>Description:</i> Similar projects have been identified. As per PoA-DD only low income households are eligible. Related eligibility criterion has been established in section A.4.2. 4) b). Already conducted similar projects constitute the contrast group for the baseline survey.</p> <p><i>Justification of evidences:</i> By means of PDDs, onsite visit, conducted interviews and document review especially baseline survey.</p> <p>Conclusion: This point is considered ok as related eligibility criterion</p>	<p>/PDDs/ /BS/ /IM01/ /IM02/ /IM03/</p>	<p>Ok</p>	<p>Ok</p>

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.
	<p>is established. Further during onsite visit (18+) farmers from contrast group have been interviewed. From these interviews it was obvious that the income of contrast group is above the average income in Sichuan province, whereas only households below this limit are eligible under this PoA. However PoA-E8 was raised especially due to the following:</p> <ol style="list-style-type: none"> 1. It is stated that the average per capita income in Sichuan Province in 2009 was 4,534.18 RMB. PP should explain that this value is applicable based on the fact that the PoA is not targeted to the entire inhabitants of Sichuan Province but local farmers. 2. Clarification is requested w.r.t. the definition of an “average household” mentioned on P. 26 and section E.5.2 within this PoA. 3. Further specification and revision is requested w.r.t. whether the stated financial analysis is representative and applicable to the range of biogas digesters (8 m³ to 15 m³). 4. PP should further justify and specify that the benchmark analysis is the appropriate method to demonstrate financial barrier under the special PoA circumstances (“non-productive“ investment). 			

<p>E.5.2.5. Are there any other key criteria and data for assessing additionality of a CPA which are necessary besides the ones mentioned above not included in the PoA-DD?</p> <p><i>Please fill out Annex 6 of this report for detailed assessment of all key criteria.</i></p>	<p><i>Description:</i> As per PoA-DD a CPA is preceded if the key criteria as established are fulfilled. The following key criteria w.r.t. investment analysis and technological barrier have been provided in PoA-DD.</p> <p>a) The equity IRR of the digester investment for an average household is calculated based on updated input parameters and the method provided in section E.5.1.</p> <p>b) A suitable and applicable IRR benchmark is quantified in the CPA-DD.</p> <p>c) The financial additionality is demonstrated by showing that the calculated IRR (excluding CDM) is below the applied investment benchmark.</p> <p>The established key criteria for technology barrier are:</p> <p>a) The description of the kind of services that can be assessed by the farmers.</p> <p>b) Clear rulings on the financial contribution of the C/ME for enhancement of the technical service network. The financial contribution of the C/ME shall cover at least 10% of the carbon revenues.</p> <p><i>Justification of evidences:</i> By means of PDDs conducted interviews and related</p> <p><i>Conclusion:</i> CAR PoA-E8 has been raised. For further assessment please refer to Annex 6 of this report.</p>	<p>/PDDs/ /IM01/ /IM02/ /POAR/</p>	<p>CAR PoA- E8</p>	<p>Ok</p>
<p>E.6. Estimation of Emission Reductions of a CPA</p>				
<p>E.6.1. Explanation of methodological choices for CPA Emission</p>	<p><i>In case the applied methodology provides choices the selection of options shall be assessed</i></p>			

<p>E.6.1.1. In case the methodology allows for different methodological choices, are the equations applied properly justified and have they been used reflecting the other methodological choices (i.e. baseline identification)?</p> <p>(EB 55 Annex 1 §§ 90, 91)</p> <p><i>Assess the correct selection and application of methodological choices. Describe whether proper justification has been provided (based on the choice of the baseline scenario, context of a typical CPA and other evidences provided) and whether the correct equations have been used reflecting the relevant methodological choices.</i></p>	<p><i>Description:</i> AMS III.R allows no methodological choices. Within the broad applicability of AMS I.C (version 18) only elements pertinent to household-size biogas systems should be used. Therefore, throughout sections E.6.2 to E.7.2 the following paragraphs apply for the calculation of ex-ante and monitoring/calculation of ex-post emission reductions:</p> <ul style="list-style-type: none"> - Baseline: paragraphs 13., 27. and 39. - Project emissions: paragraph 43. - Leakage: paragraphs 45. and 46. - Monitoring: paragraph 48. - PoA specific: 49. <p><i>Justification of evidences:</i> By means of PDDs and methodologies.</p> <p><i>Conclusion:</i> CAR PoA-E6 has been raised as methodological choices have been provided but related justification for this choice is pending.</p>	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/</p>	<p>CAR PoA- E6</p>	<p>Ok</p>
<p>E.6.1.2. In case the implementation of the project activity lead to GHG emissions within the project boundary which are expected to contribute more than 1% of the overall expected average annual emission reductions, which are not addressed by the methodology, has this parameter been included in the calculation of the emission reductions?</p> <p>(EB 55 Annex 1, §77)</p> <p><i>Please describe the extra parameters defined and calculated.</i></p>	<p><i>Description:</i></p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The implementation of the project activity does not lead to GHG emissions within the project boundary that will contribute more than 1% of the overall expected average annual emission reductions that are not addressed by the applied methodology. Thus no extra parameter is necessary. <input type="checkbox"/> The following GHG emissions caused by implementation of the project within the project boundary, have been identified as will contribute more than 1% of the overall expected average annual emission reductions, that are not addressed by the applied methodology: <p><i>Justification of evidences:</i> A typical CPA under the PoA is the installation of a biogas digester. Methane is generated by biodegradation of organic matter which is used for cooking and heating. By this fossil fuel utilization is substituted. Physical</p>	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/ /IM01/ /IM02/</p>	<p>CAR PoA- A10</p>	<p>Ok</p>

	<p>methane leakage from digester is covered and AMS I.C §43 even covers any other significant emissions associated with the project activity as project emissions.</p> <p>By means of PDD and methodologies as well as onsite visit and conducted interviews.</p> <p><i>Conclusion:</i> Methodologies applied have addressed the issue of emissions very comprehensively. However CAR PoA-A10 has been raised especially points i to iv. Besides eligibility criteria should be updated to ensure no replacement of equipment from other sites and information on electricity consumption for operation of project equipment.</p>			
<p>E.6.2. Equations, including fixed parametric values used for ER calculation</p>				
<p>E.6.2.1. Are the equations applied correctly according to the applied approved methodology?</p> <p>(EB 55 Annex 1 §§67 (c), 89, 90, 91)</p> <p><i>Describe clearly the steps taken to assess whether the methodology has been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions. Further take into consideration that all estimates of the baseline emissions can be replicated using the data and parameter values provided in the PoA-DD.</i></p>	<p><i>Description:</i></p> <p><input type="checkbox"/> The equations applied for calculation are correctly applied according to the approved methodology.</p> <p><input checked="" type="checkbox"/> The following mistakes have been identified in this context:</p> <ol style="list-style-type: none"> 1. For baseline emissions after headline for AMS III.R and AMS I.C states that four steps are applied to calculate baseline emissions but thereafter only 3 Steps are stated. Therefore clarification and revision is requested. 2. Clarification is requested whether only one category of livestock is covered under the PoA as e.g. equation 3 does not distinguish between different livestock categories. 3. Clarification is requested w.r.t. “average swine population per household in city k”. According to AMS III.R the “annual average animal population (NLT)” shall be monitored, therefore clarification and revision to comply consistency is requested. Besides section E.6.2 states that the average swine population “before the installation of the biogas 	<p>/PDDs/ /AMS.I.C/ /AMS.III. R/</p>	<p>CAR PoA- E9</p>	<p>Ok</p>

	<p>digester” is applied. Justify and confirm that this will lead to real, measureable and conservative emission reductions and why the number before the installation is applied as this is a monitoring parameter.</p> <ol style="list-style-type: none"> 4. Specify the parameter 1/1000 in equation 4 of section E.6.2. 5. Baseline emissions under AMS I.C, step 2: clarify which “national specific emission factor for raw” is applied. Besides the exact source of carbon content and net calorific value as per table under step 2 should be provided. Finally justification is requested that the fossil fuel type used in baseline scenario is raw coal with stated chemical properties and not a less carbon intensive fuel is used. 6. During onsite visit it has been identified that two types of fossil fuels are used by farmer either raw coal or honeycomb coal. Clarification and specification is requested that the stated emission factor represents both types of fuel. 7. Clarification is requested w.r.t. equation to calculate bundled baseline, project and emission reduction as the “per household” emissions are multiplied by total number of households and the sum of those is taken. 8. Clarification is requested why the average swine population before the installation of biogas digesters is applied to calculate project emissions? 9. Inconsistency between PoA-DD and AMS I.C for the determination of project emissions has been identified. AMS I.C as per §43 requires the calculation of project emissions from onsite consumption of fossil fuels by using latest version of “Tool to calculate project or leakage CO₂ emissions from fossil fuel combustion” as the PoA-DD does not reflect this. Besides PoA-DD does not provide any statement w.r.t. other project emissions as per AMS I.C. Hence clarification and revision is requested. 10. Clarification is requested w.r.t. Emission reduction calculation as per section E.6.2.. how the survey with a 			
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	<p>confidence of 95% integrates necessary obtained parameter values for e.g fuels and livestock population.</p> <p>11. Section E.6.2. does not provide any information on Leakage as per AMS III.R and AMS I.C in general . Therefore revision is requested.</p> <p>12. Carbon content and NCV instead of emission factor of a fuel should be provided as parameters.</p> <p>13. The emission factor and baseline fossil fuel use is predefined and fixed for all CPAs under the PoA as per section E.6.2. Therefore PP should justify that the baseline fuel consumption and type of fuel used will not change with time when including subsequent CPAs.</p> <p><i>Justification of evidences:</i> By means of PDDs, methodologies and related tools.</p> <p><i>Conclusion:</i> CAR PoA E-9 was raised.</p>			
<p>E.6.2.2. Have conservative assumptions been used when calculating the baseline emissions, project emissions and leakage?</p> <p>(EB 55 Annex 1 §§ 90, 91)</p> <p><i>Describe clearly the steps taken to assess whether all the assumptions and data used by the PP are listed in the PDD including references and sources and are conservatively interpreted in the PoA-DD.</i></p>	<p><i>Description:</i> The baseline emissions are the sum of the baseline emissions from methane recovery and destruction and substitution of fossil fuel. The baseline emissions are w.r.t. methane recovery are calculated by the product of Global Warming Potential, the average swine population per HH before installation of a digester and the annual CH4 emission factor for livestock. The baseline emissions w.r.t. CO2 emissions are calculated by the average annual fuel consumption of each HH before installation of the digester times an emission factor.</p> <p>The project emissions are the sum of the project emissions from physical leakage and fossil fuel consumption. The project emissions by physical leakage are calculated in accordance to AMS III.R applying default factors or factors as per 2006 IPCC guidelines as well as the average swine population. The project emissions w.r.t. CO2 emissions are calculated by the average annual fuel consumption of each HH after installation of the digester times an emission factor.</p> <p>Finally the total baseline and project emissions for all involved</p>	<p>/PDDs/ /AMS III.R/ /AMS I.C/ /IPCC/</p>	<p>CAR PoA-E9 CAR PoA-E10 CAR PoA-E14</p>	<p>Ok</p>

	<p>households in a CPA will be summed up separately.</p> <p>The total emission reductions of a CPA are the difference between the total baseline and project emissions.</p> <p><i>Justification of evidences:</i> In line with AMS III.R the baseline emissions are calculated ex-ante and as per IPCC tier 2 approach. The following IPCC factors and default values have been applied:</p> <p>In line with AMS I.C related baseline and project emissions have been calculated. Related default values have been applied e.g. the carbon content and NCV of raw coal based on data by NDRC (host country DNA).</p> <p>The remaining input values have been obtained by survey of a sample and contrast group.</p> <p><i>Conclusion:</i> CAR PoA E9 has been raised due to the reason that clarification is requested w.r.t. which “national specific emission factor for raw” is applied. Besides the exact source of carbon content and net calorific value as per table under step 2 should be provided. Besides justification is requested that the fossil fuel type used in baseline scenario is raw coal with stated chemical properties and not a less carbon intensive fuel is used. Besides the emission reductions section does not provide provisions how the survey as per AMS III. R §9 with a confidence of 95% integrates necessary obtained parameter values for e.g amount of waste or raw materials that would decay, fuels and livestock population. Further related section in PoA-DD does not provide justification for any leakage emissions. Also the emission factor and baseline fossil fuel use is predefined and fixed for all CPAs under the PoA as per section E.6.2. Therefore PP should justify that the baseline fuel consumption and type of fuel used will not change with time when including subsequent CPAs. Besides CAR PoA-E10 w.r.t. clarification of applied coal consumption and CAR PoA-E14 w.r.t. findings on the baseline survey spreadsheet have been raised.</p>			
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<p>E.6.3. Data and parameters have to be reported in the CPA-DD form</p>				
<p>E.6.3.1. Are all data and parameters which remain fixed throughout the crediting period correct, applicable to the project and will lead to a conservative estimation of emission reductions?</p> <p><i>Describe clearly the steps taken to assess whether the values used for the fixed parameters are considered reasonable, correct and applicable in the context of the project activity.</i></p>	<p><i>Description:</i></p> <p><input type="checkbox"/> All “Values of data to be applied for the purpose of calculating expected emissions reductions” are considered to be reasonable, applicable and conservative.</p> <p><input checked="" type="checkbox"/> The following mistakes have been identified in this context:</p> <ol style="list-style-type: none"> 1. Baseline emissions under AMS I.C, step 2: clarify which “national specific emission factor for raw” is applied. Besides the exact source of carbon content and net calorific value as per table under step 2 should be provided. Finally justification is requested that the fossil fuel type used in baseline scenario is raw coal with stated chemical properties and not a less carbon intensive fuel is used. 2. During onsite visit it has been identified that two types of fossil fuels are used by farmer either raw coal or honeycomb coal. Clarification and specification is requested that the stated emission factor represents both types of fuel. 3. Carbon content and NCV instead of emission factor of a fuel should be provided as parameters. 4. The emission factor and baseline fossil fuel use is predefined and fixed for all CPAs under the PoA as per section E.6.2. Therefore PP should justify that the baseline fuel consumption and type of fuel used will not change with time when including subsequent CPAs. <p><i>Justification of evidences:</i> By means of PDDs, methodologies, IPCC Guideline and NDRC webpage</p> <p><i>Conclusion:</i> CAR PoA-E9 was raised.</p>	<p>/PDDs/ /AMS III.R/ /AMS I.C/ /IPCC/</p>	<p>CAR PoA- E9</p>	<p>Ok</p>
<p>E.7.Application of the monitoring</p>				

methodology and description of the monitoring plan				
E.7.1. Data and parameters to be monitored by each CPA				
<p>E.7.1.1. Are the means of monitoring of all parameters contained in the monitoring plan feasible and in accordance with the requirements of the applied methodology?</p> <p>(EB 55 Annex 1, § 123 (a), 123 (b), 124) Assess whether the provided information for all parameters w.r.t.</p> <p>a) label (name of the data / parameter) b) data unit c) description d) source of data e) value applied for ex-ante ER calculation f) measurement equipment / method / procedure g) QA/QC procedures h) Any comment if necessary</p> <p>are appropriately described and in compliance with the requirements of the methodology.</p>	<p><i>Description:</i> As per PDD the following parameters are monitored:</p> <ul style="list-style-type: none"> Total number of HH with biogas digester located in city k, included in the CPA Number of active HH with active biogas digester located in city k, included in the CPA Mean annual operation hours of the digester MAT Methane conversion factors for each manure management system S in climate region k Average swine population at the HH in city k Soil application of the final sludge <p><i>Justification of evidences:</i> By means of PDDs and methodologies. <i>Conclusion:</i> CAR PoA-E10, CAR PoA-E11, CAR PoA-E12 and CAR PoA-E13 have been raised.</p>	<p>/PDDs/ /AMS III.R/ /AMS I.C/</p>	<p>CAR PoA-E10 CAR PoA-E11 CAR PoA-E12 CAR PoA-E13</p>	<p>Ok</p>
<p>E.7.1.2. Are all monitoring parameters as required by the applied methodology contained in the monitoring plan?</p>	<p><i>Description:</i> As per PDD the following parameters are monitored:</p> <ul style="list-style-type: none"> Total number of HH with biogas digester located in city k, included in the CPA 	<p>/PDDs/ /AMS III.R/</p>	<p>CAR PoA-E9</p>	<p>OK</p>

<p>(EB 51 Annex 1, §§ 67 (e), 122, 123 (a) , 124) <i>Assess whether all applicable parameters listed in the methodology are included in the monitoring plan.</i></p> <p><i>Pl. check further whether the selection of parameters not to be monitored is appropriate and in line with the applied methodology.</i></p> <p><i>In case of different approaches can be chosen acc. to the methodology assess whether the selection of parameters is justified and correct.</i></p>	<ul style="list-style-type: none"> • Number of active HH with active biogas digester located in city k, included in the CPA • Mean annual operation hours of the digester • MAT • Methane conversion factors for each manure management system S in climate region k • Average swine population at the HH in city k • Soil application of the final sludge <p><i>Justification of evidences: AMS I.C requires the monitoring of following relevant parameters:</i></p> <table border="1"> <tr><td>Continuous operation of the equipment/system</td><td>relevant</td></tr> <tr><td>CO2 emission factor for the electricity system in year y</td><td>Not relevant</td></tr> <tr><td>CO₂ emission factor of fossil fuel type i</td><td>relevant</td></tr> <tr><td>Quantity of electricity generated/ supplied</td><td>Not relevant</td></tr> <tr><td>Quantity of hot air</td><td>Not relevant</td></tr> <tr><td>Quantity of steam</td><td>Not relevant</td></tr> <tr><td>Net quantity of thermal energy supplied by the project activity during the year y</td><td>Not relevant</td></tr> <tr><td>Quantity of fossil fuel type j combusted in year y</td><td>relevant</td></tr> <tr><td>Net quantity of biomass consumed in year y</td><td>Not relevant</td></tr> <tr><td>Moisture content of the biomass residues</td><td>Not relevant</td></tr> <tr><td>Temperature</td><td>Not relevant</td></tr> <tr><td>Pressure</td><td>Not relevant</td></tr> <tr><td>Net calorific value of fossil fuel type i</td><td>relevant</td></tr> </table>	Continuous operation of the equipment/system	relevant	CO2 emission factor for the electricity system in year y	Not relevant	CO ₂ emission factor of fossil fuel type i	relevant	Quantity of electricity generated/ supplied	Not relevant	Quantity of hot air	Not relevant	Quantity of steam	Not relevant	Net quantity of thermal energy supplied by the project activity during the year y	Not relevant	Quantity of fossil fuel type j combusted in year y	relevant	Net quantity of biomass consumed in year y	Not relevant	Moisture content of the biomass residues	Not relevant	Temperature	Not relevant	Pressure	Not relevant	Net calorific value of fossil fuel type i	relevant	<p>/AMS I.C/ /IPCC/</p>	<p>CAR PeA- E11</p> <p>CAR PeA- E12</p>	
Continuous operation of the equipment/system	relevant																													
CO2 emission factor for the electricity system in year y	Not relevant																													
CO ₂ emission factor of fossil fuel type i	relevant																													
Quantity of electricity generated/ supplied	Not relevant																													
Quantity of hot air	Not relevant																													
Quantity of steam	Not relevant																													
Net quantity of thermal energy supplied by the project activity during the year y	Not relevant																													
Quantity of fossil fuel type j combusted in year y	relevant																													
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Moisture content of the biomass residues	Not relevant																													
Temperature	Not relevant																													
Pressure	Not relevant																													
Net calorific value of fossil fuel type i	relevant																													

	<table border="1"> <tr> <td>Net calorific value of biomass residue type k</td> <td>Not relevant</td> </tr> <tr> <td>Parameters related to Geothermal project activity</td> <td>Not relevant</td> </tr> </table>	Net calorific value of biomass residue type k	Not relevant	Parameters related to Geothermal project activity	Not relevant				
Net calorific value of biomass residue type k	Not relevant								
Parameters related to Geothermal project activity	Not relevant								
<p>E.7.1.3. Does the PoA-DD mention reasonable values for all ex-ante calculation / monitoring parameters?</p> <p><i>Describe clearly the steps taken to assess whether the values used for the monitoring parameters are considered reasonable, applicable and conservative in the context of the project activity</i></p>	<p><i>Description:</i> As per PDD the following values for all monitoring parameters are provided:</p> <ul style="list-style-type: none"> Total number of HH with biogas digester located in city k, included in the CPA: planned to be 30,000 Number of active HH with active biogas digester located in city k, included in the CPA: planned to be 30,000 Mean annual operation hours of the digester: 8640 hours (360 days) MAT: as per latest Sichuan Statistical Yearbook 	<p>/PDDs/ /AMS III.R/ /AMS I.C/ /IPCC/ /BS/ /IM03/</p>	<p>CAR PoA-E10 CAR PoA-E11 CAR PoA-E12 CAR</p>	<p>Ok</p>					

	<ul style="list-style-type: none"> • Methane conversion factors for each manure management system S in climate region k: IPCC 2006 Guidelines Vol. 4, Chapter 10, Table 10A-7 and 10.17 (swine) • Average swine population at the HH in city k: values taken from baseline survey. • Soil application of the final sludge: N/A <p><i>Justification of evidences:</i> By means of PDDs, methodology and IPCC Guideline besides onsite visit and conducted interviews.</p> <p><i>Conclusion:</i> CAR PoA-E10, CAR PoA-E11, CAR PoA-E12 and CAR PoA-E14 have been raised.</p>		PoA-E14	
<p>E.7.2. Description of the monitoring plan for a SSC-CPA</p>				
<p>E.7.2.1. Has a monitoring plan for a CPA been developed in accordance with the approved monitoring methodology, and identified the monitoring provisions and data parameters a CPA has to apply/monitor?</p> <p>(EB 55 Annex 38, §6(j))</p>	<p><i>Description:</i> A monitoring plan has been developed in the PoA-DD. The monitoring plan includes Organisational setup, data monitored, monitoring sampling study and data management.</p> <p><i>Justification of evidences:</i> By means of PDDs, methodology and document review.</p> <p><i>Conclusion:</i> CAR PoA-E12 and CAR PoA-E13 have been raised.</p>	<p>/PDDs/ /AMS III.R/ /AMS I.C/ /BS/</p>	<p>CAR PoA-E12 CAR PoA-E13</p>	<p>Ok</p>
<p>E.7.2.2. Are the QA/QC procedures appropriate sufficient to ensure the emission reductions achieved from the project activity can be reported ex-post and verified?</p> <p>(EB 55 Annex 1 §124 (b))</p> <p><i>Please consider the description given in section B.7.2. Describe which QA/QC provisions are considered. Address Quality Management System provisions, calibration and maintenance of equipment. Address further any review</i></p>	<p><i>Description:</i> No QA/QC procedures are provided in the MP of the PoA-DD.</p> <p><i>Justification of evidences:</i> By means of PDDs.</p> <p><i>Conclusion:</i> CAR PoA E-12 has been raised.</p>	<p>/PDDs/</p>	<p>CAR PoA-E12</p>	<p>Ok</p>

<i>procedures.</i>				
<p>E.7.2.3. Have all means of implementing the monitoring plan, e.g. procedures for data management, emergency preparedness, been described clearly and in line with the methodology?</p> <p>(EB 55 Annex 1 123 (b), 124) Check whether all necessary equations have been provided in the PoA-DD. Pl. consider that ex-post and ex-ante calculations might be different.</p> <p>Please consider that additional equations might be necessary to calculate auxiliary parameters.</p> <p>Assess whether the described monitoring arrangements are sufficient and realistic to enable a thorough monitoring. Pl. consider also special monitoring conditions, e.g. downtimes of monitoring equipment etc</p>	<p><i>Description:</i> Procedure for data management is provided. No QA/QC and emergency preparedness is included in the MP</p> <p><i>Justification of evidences:</i> By means of PDDs.</p> <p><i>Conclusion:</i> CAR PoA-E12 has been raised.</p>	/PDDs/	CAR PoA- E12	Ok
<p>E.8. Date of completion of the application of the baseline study and monitoring methodology and the name of the responsible person(s)/ entity(ies)</p>				
<p>E.8.1. Have the dates of the completion of the application of the baseline study and monitoring methodology and the name of the responsible person(s)/ entity(ies) appropriately mentioned?</p>	<p><i>Description:</i> Date of completion is 26/10/2010 and names of responsible persons have been appropriately mentioned with title, company name and Email.</p> <p><i>Justification of evidences:</i> By means of PDDs and interview.</p> <p><i>Conclusion:</i> This point is ok.</p>	/PDDs/ /IM01/	Ok	Ok

Annexes				
<p>An.1. Has contact information on CME and Participants in the PoA been sufficiently and appropriately included in Annex 1 of the PoA-DD and consistent with section A.3?</p> <p>(EB 55 Annex 1, § 52)</p> <p><i>Each organisation listed in section A.3 shall include the following mandatory fields: Organization, Name of contact person, Street, City, Postfix/ZIP, Country, Telephone and Fax or e-mail.</i></p>	<p><i>Description:</i> Annex of PoA-DD contains contact information of C/ME Chengdu OASIS Science & Technology Co. Ltd. And Annex I project participant UPM Umwelt-Projekt-Management GmbH. Related tables for both participants have been completely filled.</p> <p><i>Justification of evidences:</i> By means of PDDs and conducted interviews.</p> <p><i>Conclusion:</i> As related information is provided and information has been crosschecked by interviews this part is ok. However CL PoA-An1 has been raised as the organization name in section A.3 for the C/ME contains a comma between Co. and Ltd. (Chengdu OASIS Science & Technology Co., Ltd.) whereas in Annex 1 this comma is missing.</p>	<p>/PDDs/ /IM01/</p>	<p>CL PoA- An1</p>	<p>Ok</p>
<p>An.2. Has any important Public Funding information been included in Annex 2 of the PoA-DD and consistent with section A.4.5?</p> <p>(EB 55 Annex 38, §6(n))</p> <p><i>Assess information from Parties included in Annex I on sources of public funding for the project activity which shall provide an affirmation that such funding does not result in a diversion of official development assistance and is separate from and is not counted towards the financial obligations of those Parties.</i></p>	<p><i>Description:</i> As per PoA-DD the PoA is not supported by any public funding.</p> <p><i>Justification of evidences:</i> By means of PDDs and document review.</p> <p><i>Conclusion:</i> CAR PoA-A17 has been raised.</p>	<p>/PDDs/ /AF/</p>	<p>CAR PoA- A17</p>	<p>Ok</p>
<p>An.3. Has any important Baseline information necessary to be included in Annex 3 of the PoA-DD and consistent with section E.4?</p> <p>(EB 55 Annex 1, §§ 67 (b), 82, §§ 104 – 106)</p>	<p><i>Description:</i> Annex 3 of the PoA-DD provides baseline information w.r.t. the Mean Annual Temperature (MAT) of 21 project cities in Sichuan Province in year 2008 based on Sichuan Statistical Yearbook 2009, page 310.</p> <p><i>Justification of evidences:</i> By means of PDDs, corresponding methodologies and IPCC Guideline.</p>	<p>/PDDs/ /AMS III.R/ /AMS I.C/</p>	<p>CAR PoA- E11</p>	<p>Ok</p>

<p><i>Assess any further background information used in the application of the baseline methodology. This may include tables with time series data, documentation of measurement results and data sources, etc.</i></p>	<p><i>Conclusion:</i> CAR PoA-E11 has been raised due to the reason that IPCC Guideline for MCFs tier 2 page 10.43 states that default factors are provided in Table 10.17 for specific annual average temperature in each climate range. Areas that have extreme high or low annual average temperatures outside the 10 to 28 degree Celsius range should utilize the end-of-range values or investigate developing country-specific values. But table 10 of PoA-DD contains cities with MAT outside this range and parameter $MCF_{S,k}$ in section E.7.1 does not contain description how the value for this parameter for these cities is obtained.</p>	<p>/IPCC/</p>		
<p>An.4. Has any important Monitoring information necessary to be included in Annex 4 of the PoA-DD and consistent with section A.4.4 and E.7? (EB 55 Annex 38, §6(j); EB 55 Annex 1 123 (b), 124) <i>Assess any further background information used in the application of the monitoring methodology. This may include tables with time series data, additional documentation of measurement equipment, procedures, etc.</i></p>	<p><i>Description:</i> No further information are provided in Annex 4 of PoA-DD. <i>Justification of evidences:</i> By means of PDDs. <i>Conclusion:</i> as no further information is provided this point is ok.</p>	<p>/PDDs/</p>	<p>Ok</p>	<p>Ok</p>

Table A-1-2: Generic CPA-DD Requirements Checklist

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.																																	
Consistency and specific CPA issues	<i>This Checklist shall be filled by comparing the draft version of generic CPA-DD published for GSCP with the finalized PoA-DD.</i>																																				
1. Has the latest version of the CDM-SSC-CPA-DD form been applied? (EB 55 Annex 1 § 55)	<p><i>Description:</i> The latest version 01 of CDM-SSC-CPA-DD has been used.</p> <p><i>Justification of evidences:</i> By means of checking the CPA-DD and unfccc website.</p> <p><i>Conclusion:</i> The latest version 01 is properly used.</p>	/PDDs/ /POA-DDs-T/ /unfccc/	OK	OK																																	
2. Are all necessary information consistent between the finalized POA-DD and the Generic CPA-DD? (EB 55 Annex 38 §12(d))	<p><i>Description:</i> Not all sections are consistent with the finalized PoA-DD, especially information between the following sections:</p> <table border="1"> <thead> <tr> <th>Generic CPA-DD</th> <th>Finalized PoA-DD</th> </tr> </thead> <tbody> <tr><td>A.1.</td><td>A.1</td></tr> <tr><td>A.2.</td><td>A.2. and A.4.2.1.</td></tr> <tr><td>A.3.</td><td>A.3.</td></tr> <tr><td>A.4.1.1.</td><td>A.4.1.1.</td></tr> <tr><td>A.4.1.2.</td><td>A.4.1.2.</td></tr> <tr><td>A.4.2.1.</td><td>*Not prior to GSP of PoA-DD</td></tr> <tr><td>A.4.2.2.</td><td>-</td></tr> <tr><td>A.4.3.1.</td><td>B.1.</td></tr> <tr><td>A.4.3.2.</td><td>B.2.</td></tr> <tr><td>A.4.4.</td><td>-</td></tr> <tr><td>A.4.5.</td><td>A.4.5.</td></tr> <tr><td>A.4.6.</td><td rowspan="2">A.4.4. and A.4.4.1.</td></tr> <tr><td>A.4.7.</td></tr> <tr><td>B.1.</td><td>A.1</td></tr> <tr><td>B.2.</td><td>A.4.2.2.</td></tr> <tr><td>B.3.</td><td>A.4.3. , E.5. , E.5.1. and E.5.2.</td></tr> </tbody> </table>	Generic CPA-DD	Finalized PoA-DD	A.1.	A.1	A.2.	A.2. and A.4.2.1.	A.3.	A.3.	A.4.1.1.	A.4.1.1.	A.4.1.2.	A.4.1.2.	A.4.2.1.	*Not prior to GSP of PoA-DD	A.4.2.2.	-	A.4.3.1.	B.1.	A.4.3.2.	B.2.	A.4.4.	-	A.4.5.	A.4.5.	A.4.6.	A.4.4. and A.4.4.1.	A.4.7.	B.1.	A.1	B.2.	A.4.2.2.	B.3.	A.4.3. , E.5. , E.5.1. and E.5.2.	/PDDs/ /PDDs-F/ /XLS/	CAR gCPA- +	OK
Generic CPA-DD	Finalized PoA-DD																																				
A.1.	A.1																																				
A.2.	A.2. and A.4.2.1.																																				
A.3.	A.3.																																				
A.4.1.1.	A.4.1.1.																																				
A.4.1.2.	A.4.1.2.																																				
A.4.2.1.	*Not prior to GSP of PoA-DD																																				
A.4.2.2.	-																																				
A.4.3.1.	B.1.																																				
A.4.3.2.	B.2.																																				
A.4.4.	-																																				
A.4.5.	A.4.5.																																				
A.4.6.	A.4.4. and A.4.4.1.																																				
A.4.7.																																					
B.1.	A.1																																				
B.2.	A.4.2.2.																																				
B.3.	A.4.3. , E.5. , E.5.1. and E.5.2.																																				

Checklist Item (incl. guidance for the validation team)	Validation Team Comments (justification and substantiation of information, data and evidences)	Ref.	Draft Concl.	Final Concl.																				
	<table border="1"> <tr><td>B.4.</td><td>E.3.</td></tr> <tr><td>B.5.</td><td>E.6.</td></tr> <tr><td>B.5.1.</td><td>E.6.3.</td></tr> <tr><td>B.5.2.</td><td>E.6.1. and E.6.2.</td></tr> <tr><td>B.5.3.</td><td>-</td></tr> <tr><td>B.6.</td><td>E.1. and E.2.</td></tr> <tr><td>B.6.1.</td><td>E.7. , E.7.1., E.7.2. and A.4.4.2.</td></tr> <tr><td>C.1. to C.3</td><td>C.1. to C.3</td></tr> <tr><td>D.1. to D.4.</td><td>D.1 to D.4.</td></tr> <tr><td>Annex 1 to Annex 4</td><td>Annex 1 to Annex 4</td></tr> </table> <p><i>Justification of evidences:</i> By means of comparing the <i>draft version of generic CPA-DD published for GSCP with the finalized PoA-DD.</i></p> <p><i>Conclusion:</i> CAR gCPA-1 was raised.</p>	B.4.	E.3.	B.5.	E.6.	B.5.1.	E.6.3.	B.5.2.	E.6.1. and E.6.2.	B.5.3.	-	B.6.	E.1. and E.2.	B.6.1.	E.7. , E.7.1., E.7.2. and A.4.4.2.	C.1. to C.3	C.1. to C.3	D.1. to D.4.	D.1 to D.4.	Annex 1 to Annex 4	Annex 1 to Annex 4			
B.4.	E.3.																							
B.5.	E.6.																							
B.5.1.	E.6.3.																							
B.5.2.	E.6.1. and E.6.2.																							
B.5.3.	-																							
B.6.	E.1. and E.2.																							
B.6.1.	E.7. , E.7.1., E.7.2. and A.4.4.2.																							
C.1. to C.3	C.1. to C.3																							
D.1. to D.4.	D.1 to D.4.																							
Annex 1 to Annex 4	Annex 1 to Annex 4																							
3. Does the generic CDM-CPA-DD include Name/contact details of the entity/individual responsible for the operation of the CPA? (EB 55 Annex 38 §7(a))	<p><i>Description:</i> The responsible person and contact details of the entity responsible for operation of the CPA has been included in Annex 1 of the generic CPA-DD.</p> <p><i>Justification of evidences:</i> By means of generic CDM-CPA-DD, Annex 1 and onsite interviews.</p> <p><i>Conclusion:</i> No issues were raised.</p>	/PDDs/ /IM01/ /IM02/	OK	OK																				

ANNEX 2: ASSESSMENT OF BASELINE IDENTIFICATION

Table A-2: Assessment of Baseline Identification

<input type="checkbox"/>	Baseline is not identified
--------------------------	----------------------------

<input checked="" type="checkbox"/>	Assessment of baseline see below
-------------------------------------	----------------------------------

PP Demonstration					DOE Assessment	
Baseline Alternatives identified	Inline with the Methodology	Eliminated	Reasons for elimination / non-elimination from list of alternatives	Evidence used	Evidences are appropriate	Assessment of validation team (results and means of assessment)
The baseline scenario is the situation where, in the absence of the project activity, biomass and other organic matter are left to decay anaerobically within the project boundary and methane is emitted to the atmosphere. Baseline emissions (BE _y) are calculated ex ante using the amount of the waste or raw material that would decay anaerobically in the absence of the project activity, with the most recent IPCC tier 2 approach (please refer to the chapter 'Emissions from Livestock and Manure management' under the volume Agriculture, Forestry and other Land use' of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories). Country/regional-specific values shall be used if	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The baseline scenario is prescribed by the methodology AMS III.R.		<input checked="" type="checkbox"/>	The baseline scenario is selected according to the prescribed one in the applied methodology AMS III.R (Version 01). Therefore, it is deemed corrected and appropriate.

PP Demonstration					DOE Assessment	
Baseline Alternatives identified	Inline with the Methodology	Eliminated	Reasons for elimination / non-elimination from list of alternatives	Evidence used	Evidences are appropriate	Assessment of validation team (results and means of assessment)
available.						
For renewable energy technologies that displace technologies using fossil fuels, the simplified baseline is the fuel consumption of the technologies that would have been used in the absence of the project activity times an emission factor for the fossil fuel displaced. For calculating the emission factor, reliable local or national data shall be used. IPCC default values shall be used only when country or project specific data are not available or demonstrably difficult to obtain.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The baseline scenario is prescribed by the methodology AMS I.C.		<input checked="" type="checkbox"/>	The baseline scenario is selected according to the prescribed one in the applied methodology AMS I.C (Version 01). Therefore, it is deemed corrected and appropriate.

ANNEX 3: ASSESSMENT OF FINANCIAL PARAMETERS

Table A-3: Assessment of Financial parameters

<input checked="" type="checkbox"/>	No financial parameters are used for additionality justification
<input type="checkbox"/>	Assessment of all financial parameters see below

PP Demonstration					DOE Assessment		
Parameter	Value applied	Unit	Source of Information (please indicate document and page)	Reference	values applied are correct	Evidences used are appropriate	Comment
					<input type="checkbox"/>	<input type="checkbox"/>	

ANNEX 4: ASSESSMENT OF BARRIER ANALYSIS

Table A-4: Assessment of Barrier Analysis

<input type="checkbox"/>	No barrier parameters are used for additionality justification
<input checked="" type="checkbox"/>	As per additionality justification at CPA level
<input type="checkbox"/>	Assessment of barriers see below

PP Demonstration			DOE Assessment	
Kind of Barrier (invest, tech, other)	Description of Barrier	Evidence used	Appropriate	Explanation of final result
			<input type="checkbox"/>	

ANNEX 5: OUTCOME OF THE GSCP

Table A-5: Outcome of the Global Stakeholder Consultation Process

(§§ 41, 42 VVM Version 1.2)

<input type="checkbox"/>	No comments were received during the global stakeholder consultation period
<input checked="" type="checkbox"/>	Comments were received during the global stakeholder consultation period. The comments (in unedited form) and the consideration/response of the validation team are presented below:

Comment No.:	Comment by:	Inserted on:	Subject	Comment ^{*)}	Action taken by the validation team to take due account on the comment ^{*)}	Conclusion (incl. CARs CLs or FARs)
1	John Smith	2010-11-23 via Email	Additionality / Leakage problem	<p>Dear DOE validation team,</p> <p>I would like to draw your attention on serious problems that undermine the Programme of Activity 0059.</p> <p>As you know there is, for more than 25 years, a national biogas program in China which has built around 40 millions biodigesters by the end of 2010. This program is funded by Chinese public money; a grant is given to each household that built a biodigester.</p> <p>The PoA0059 propose to use the government money to target poorer people, which is a good thing in itself. Nevertheless</p>	Further clarification has been requested from PP/CME via CAR PoA-D1	<p>Please refer to CAR PoA-D1.</p> <p>The revised PoA applies the Microscale additionality Guidance (EB60 Annex25), and as far as the conditions are met, each household under the microscale CPA will be automatically additional; hence as per the current CDM rule, with or without the government</p>

Comment No.:	Comment by:	Inserted on:	Subject	Comment *)	Action taken by the validation team to take due account on the comment *)	Conclusion (incl. CARs CLs or FARs)
				<p>it will not increase the number of households who will benefit from a biodigester in Sichuan province.</p> <p>Without the PoA0059, the government will build X biodigester under its usual program</p> <p>With the project, the government will build X-Y biodigesters under its usual program, and the PoA0059 will build Y biodigesters.</p> <p>So with or without the project the number of biodigesters will be the same. From the atmosphere point of view there is no impact from the project.</p> <p>Another way of saying the same thing is to consider leakage: for each poor household who get the biodigester thanks to the PoA0059, another (richer) household, outside the project boundary, will not get any biodigester from the government program.</p> <p>I hope you understand the reasoning above, I can provide more detail if needed.</p> <p>I put in copy CDM Watch so that they are informed of the threat from this non additional/leaking project that would compromise a little bit more CDM environmental integrity.</p>		<p>subsidy scheme, the PoA is additional.</p> <p>Besides eligibility criteria 6.5 is established to ensure that only low-income households are covered by this PoA. This will be confirmed for each CPA by the Sichuan Rural Energy Office (SREO).</p>

Comment No.:	Comment by:	Inserted on:	Subject	Comment *)	Action taken by the validation team to take due account on the comment *)	Conclusion (incl. CARs CLs or FARs)
				regards.		
2				<p>“... that the funding for each province is decided in Beijing for a 5 five years period without any link to the registration of CDM project in the province. Therefore the amount of public money available for one province during each five years period with/without the CDM project is the same. The grant under government program is 1500 RMB in Sichuan (see PoA-DD documentation), the grant from government under PoA0059 is also 1500 RMB. Thus the number of biodigesters built in Sichuan will be the same with or without the PoA0059.”</p>	<p>Further clarification has been requested from PP/CME via CAR PoA-D1</p>	<p>Please refer to CAR PoA-D1.</p> <p>The revised PoA applies the Microscale additionality Guidance (EB60 Annex25), and as far as the conditions are met, each household under the microscale CPA will be automatically additional, hence as per the current CDM rule, with or without the government subsidy scheme, the PoA is additional.</p> <p>Besides eligibility criteria 6.5 is established to ensure that only low-income households are covered by this PoA. This will be confirmed for each CPA by the Sichuan Rural Energy Office (SREO).</p>

Comment No.:	Comment by:	Inserted on:	Subject	Comment ^{*)}	Action taken by the validation team to take due account on the comment ^{*)}	Conclusion (incl. CARs CLs or FARs)

^{*)} In case clarifications have been requested by the validation team corresponding rows shall be added

ANNEX 6: ELIGIBILITY CRITERIA ASSESSMENT

Table A-6: Assessment on Eligibility Criteria for inclusion of CPAs under this PoA

A full list shall be included in section A.4.2.2 of the PoA-DD and B.2 of the generic CPA-DD. (EB 55 Annex 38 §12(b))

<input type="checkbox"/>	Eligibility Criteria for inclusions of CPAs under this PoA has not been sufficiently described
<input checked="" type="checkbox"/>	Eligibility Criteria for inclusions of CPAs under this PoA has been sufficiently described as follows

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
1.	The CPA has been approved by the C/ME.	The C/ME manages the CDM implementation of the proposed PoA. It shall therefore approve the CPA in a written statement.	<ul style="list-style-type: none"> Written approval letter of the C/ME 	<input checked="" type="checkbox"/>	The criterion refers to EB55 Annex 38 §7 (h) and sufficiently addresses that the CPA is neither registered as a CDM project activity nor included in another registered PoA and therefore eligible under this PoA.
2.	The geographic boundary of the CPA lies within Sichuan province.	The boundary of each CPA shall be a subset of and not exceed the PoA boundary.	<ul style="list-style-type: none"> SSC-CPA-DD 	<input checked="" type="checkbox"/>	The criterion refers to EB 55 Annex 38 §6 (b) and §7 (a) to ensure that each CPA under the PoA lies within the geographical boundaries of the PoA boundary. The CPA-DD under section A.4.1.2. will provide a map of geographical boundary of each CPA and will confirm the compliance to this criterion. Further the CPA-DD will provide the GPS coordinates of the corresponding city or

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
					county where the measures are installed. Therefore this criterion is deemed sufficiently established.
3.	Measures to avoid double counting are implemented.				
3.1	<p>The CPA implementers confirm in written statements that:</p> <p>a) All biogas systems to be newly installed under the CPA are not and will not be part of another CDM project or program activity and that no CERs will be claimed for the biogas system other than those to be claimed by the C/ME on behalf of the CPA implementer and the participating households respectively; and</p> <p>b) That he is aware and agrees with the inclusion of the CPA to the proposed PoA.</p>	The written statements of the CPA implementer compose the first layer of measures to avoid double counting.	<ul style="list-style-type: none"> CPA inclusion letter 	<input checked="" type="checkbox"/>	This criterion is to ensure the CPA exemption from debundling requirement EB 54 Annex 13 paragraph 10, and is deemed sufficient.
3.2	The biogas systems for all involved	A written statement of the technology	<ul style="list-style-type: none"> Written 	<input checked="" type="checkbox"/>	This criterion is to ensure the CPA exemption from debundling requirement EB 54 Annex 13 paragraph 10,

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
	households is to be newly installed under the CPA is not and will not be part of another CDM project or program activity and that no CERs will be claimed for the biogas system other than those to be claimed by the C/ME on behalf of the CPA implementer and the participating households respectively;	implementer comprises the second layer of measures to avoid double counting.	statement by the implementer of the technology (SREO)		and is deemed sufficient.
3.3	A check for double counting of single households came to a negative result.	The check performed by the C/ME (procedures described in section A.4.4.1) composes the third layer of measures.	<ul style="list-style-type: none"> CPA household databases of all previously included CPAs. CPA household database of new CPA. Exclusive agreement between SREO and the C/ME. Documented outcome of the 	<input checked="" type="checkbox"/>	<p>This criterion 3.3 ensures that no double counting will occur. The validation team confirms this criterion together with criterion 3.1 and 3.2 give criteria that will prevent double counting of any small scale biogas digester within each CPA, among all CPAs in this PoA, between CPA in this PoA and another CDM project, or between CPA in this PoA and another CPA in another PoA. Thus this criterion is deemed appropriate and sufficient.</p> <p>Besides, the unique identification of each digester can be easily distinguished by the given serial number. The household database will be crosschecked for each CPA accordingly.</p>

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
			double counting check performed by the C/ME. This report should cover the source of information used (documents available on unfccc.int and household databases in case of overlapping regions).		
4.	All relevant applicability criteria of methodology AMS-III.R shall be met.				
4.1	The project installs methane recovery and combustion systems to existing sources of methane emissions.	Applicability criterion 1 (a) of methodology AMS-III.R.	<ul style="list-style-type: none"> Written statement by the implementer of the technology 	<input checked="" type="checkbox"/>	This criterion 4.1 refers to applicability requirements of AMS.III.R version 2, paragraph 1 (a), and is deemed appropriate. For each CPA the implementer provides a written statement that a digester is installed including biogas

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
			(SREO)		stove for methane destruction in line with national standards. Therefore this is deemed sufficient.
4.2	The installed methane recovery systems achieve annual emission reductions of less than 5 tCO ₂ e. (This can be shown by demonstrating that the annual average temperature does not exceed 21°C and the annual average number of pigs is no larger than 33.7 for the project households.	Applicability criterion 2 of methodology AMS-III.R. The calculations and explanations carried out in Annex 3.3 of PoA-DD demonstrate that for an average annual temperature of 21°C and below, the maximum number of pigs for which the emission reductions stay below 5 tCO ₂ e is 17.2. Therefore, these two figures will be used as a simplified criterion. In case the mean annual temperature should exceed 21°C for a new CPA, the detailed calculation will be provided during the inclusion.	<ul style="list-style-type: none"> • Baseline survey (annual average number of pigs) • Temperature data from official sources (e.g. the Sichuan Statistical Yearbook). • ER calculation sheet (in case the annual mean temperature should exceed 21°C). 	<input checked="" type="checkbox"/>	This criterion 4.2 refers to applicability requirements of AMS.III.R version 2, paragraph 2, and is deemed appropriate. Based on the emission reduction equations provided by AMS.III.R and applying the maximum mean annual temperatures given as per national statistics as well as IPCC default values for Asian swine and the result of 5 tCO ₂ e goal seeking could be applied to derive the number of pigs which would be necessary per household to reach the 5 tCO ₂ e limit. DOE has recalculated the same and found that 17.2 pigs would be necessary and therefore could confirm stated number. Besides during onsite visit DOE found that in average 5 pigs per household far less than the limit necessary to reach the 5 tCO ₂ e. Further as this can be crosschecked with the data provided as per expected minimum evidence, baseline survey, and substantiated by onsite sampling onsite visits this criterion is deemed sufficient.

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
4.3	Methodology AMS-III.R is used in combination in with methodology AMS-I.C.	Applicability criterion 3 of methodology AMS-III.R.	<ul style="list-style-type: none"> SSC-CPA-DD 	<input checked="" type="checkbox"/>	<p>This criterion 4.3 refers to applicability requirements of AMS.III.R version 2, paragraph 3, and is deemed appropriate.</p> <p>As per EB58 Annex 23 §11 a) methodologies AMS.III.R and AMS.I.C are applicable for CPAs under a PoA without prior approval.</p> <p>As each CPA under this PoA is used in combination with AMS.I.C this criterion is deemed ok.</p>
4.4	The sludge must be handled aerobically. In case of soil application of the final sludge the proper conditions and procedures that ensure that there are no methane emissions must be ensured.	<p>Applicability criterion 4 (a) of methodology AMS-III.R.</p> <p>The households are advised on the aerobic sludge handling according to a guideline from the Sichuan Biogas Society. To confirm the compliance with this criterion, the claimed emission reductions are reduced by the share of households that do not apply the</p>	<ul style="list-style-type: none"> Statement on aerobic application by the Sichuan Biogas Society 	<input checked="" type="checkbox"/>	<p>This criterion 4.4 refers to applicability requirements of AMS.III.R version 2, paragraph 4 (a), and is deemed appropriate.</p> <p>As the common practice at rural households is the use of the manure/sludge as a fertilizer, and the installation still provides the farmers with the digestive, an even better fertilizer, and based on the provided statement and substantiated by interviews with rural farmers during validation and onsite observation this criterion is deemed sufficient.</p>

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
		correct procedures after the monitoring.			
4.5	Measures shall be used (e.g. combusted or burnt in a biogas burner for cooking needs) to ensure that all the methane collected by the recovery system is destroyed.	Applicability criterion 4 (b) of methodology AMS-III.R.	<ul style="list-style-type: none"> Written statement on household advice by the implementer of the technology (SREO) Technical standard NY_T 1639-2008 that describes the necessity of a biogas stove to be installed with the biogas digester. 	<input checked="" type="checkbox"/>	<p>This criterion 4.5 refers to applicability requirements of AMS.III.R version 2, paragraph 4 (a), and is deemed appropriate.</p> <p>Written statement by the implementer of the technology (SREO) that households are advised in the operation of the installed biogas digester including a biogas stove. Besides as the system is installed by trained technicians in accordance to national standards this criterion is deemed ok. This is further substantiated that the installation could be crosschecked during inclusion by onsite visit against the applicable standard.</p>
4.6	Aggregated annual emission reductions of all systems included shall be less than or equal to 60 kt CO ₂ equivalent.	Applicability criterion 5 of methodology AMS-III.R.	<ul style="list-style-type: none"> SSC-CPA-DD 	<input checked="" type="checkbox"/>	<p>This criterion 4.6 refers to applicability requirements of AMS.III.R version 2, paragraph 5, and is deemed appropriate.</p> <p>As each CPA is designed in a way to comply with the threshold limits of EB60 Annex 25 for demonstration of additionality for microscale project activities and the</p>

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
					related microscale threshold is 20 ktCO ₂ e in combination with criterion 13.1 this criterion will be met. Therefore the DOE considers this criterion as sufficient.
5.	All relevant applicability criteria of methodology AMS-I.C shall be met ⁴ .				
5.1	This category comprises renewable energy technologies that supply users with thermal energy that displaces fossil fuel use. These units include technologies such as solar thermal water heaters and dryers, solar cookers, energy derived from renewable biomass and other technologies that provide thermal energy that displaces fossil fuel.	Applicability criterion 1 of methodology AMS-I.C.	<ul style="list-style-type: none"> SSC-CPA-DD 	<input checked="" type="checkbox"/>	<p>This criterion 5.1 refers to applicability requirements of AMS.III.R version 2, paragraph 1, and is deemed appropriate.</p> <p>Each individual measure under this PoA is the installation of a biogas digester. The methane generated by this digester is used in the kitchen by a biogas stove for cooking. Prior to the installation of the individual measure the households use raw coal to satisfy their energy demand. This is crosschecked by onsite visit and interviews with a sample group of more than 100 farmers during validation and site observations.</p> <p>The CPA-DD will provide related technical description of the technology to be installed and in combination with</p>

⁴The applicability criteria described in paragraphs 2,3,6 are only applicable to cogeneration units; the criterion described in paragraph 5 is applicable to co-fired systems. Paragraph 7 discusses the situation in which heat/steam and/or electricity are delivered to other facilities. Criteria 8 and 9 describe projects that modify, retrofit or extend existing facilities. Criteria 10 and 11 provide requirements for projects that are based on charcoal and solid biomass. Therefore, all of these paragraphs are not applicable to the proposed PoA and will not be included in the eligibility criteria for new CPAs.

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
					criterion 6.3 this criterion is considered sufficiently addressed.
5.2	The total installed/rated thermal energy generation capacity of the project equipment is equal to or less than 45 MW thermal.	Applicability criterion 4 of methodology AMS-I.C.	<ul style="list-style-type: none"> SSC-CPA-DD Biogas stove test report 	<input checked="" type="checkbox"/>	<p>This criterion 5.2 refers to applicability requirements of AMS.III.R version 2, paragraph 4, and is deemed appropriate.</p> <p>As each CPA is designed in a way to comply with the threshold limits of EB60 Annex 25 for demonstration of additionality for microscale project activities and the related microscale threshold is 15MW_{th} in combination with criterion 12.1 this criterion will be met.</p> <p>This can be crosschecked with number of households as provided in corresponding CPA-DD and biogas stove test report. The multiplication of both shall be less than 15 MW_{th}.</p> <p>Therefore the DOE considers this criterion as sufficient.</p>
6.	All households meet the inclusion criteria for households to be included in a certain CPA. They				
6.1	are located within the geographic boundary of the CPA.	No household should be located outside the defined CPA boundary.	<ul style="list-style-type: none"> CPA household database SSC-CPA-DD 	<input checked="" type="checkbox"/>	The criterion refers to EB 55 Annex 3 §7 (a) to ensure that each individual measure under the CPA lies within the geographical boundaries of the CPA boundary. The CPA-DD under section A.4.1.2. will provide a map of

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
					geographical boundary of each CPA and will confirm the compliance to this criterion. Further the database provides a unique identification number of each household along with the household name, city, county, town, village besides digester ID. By this and in combination with criterion 2 it can be verified that each individual measure lies within the boundary of the corresponding CPA. Therefore this criterion is deemed sufficiently established.
6.2	generate animal manure and wastes from agricultural activities that are currently stored under anaerobic conditions in deep pits.	To allow the identical application of the baseline and monitoring methodologies to all households, only households with an existing pit for manure storage are accepted.	<ul style="list-style-type: none"> Written statement from SREO after choosing the households for the PoA. 	<input checked="" type="checkbox"/>	This criterion refers to the baseline identification and constant application of the same of each individual measure during monitoring. Further contributes to the homogeneousness of the CPAs and therefore to the sampling method applied during inclusion and verification. Only households with deep pits under clearly anaerobic conditions are allowed under this PoA. This is crosschecked by written confirmation from SREO ^{CON/} . Further DOE has checked this during onsite validation of the PoA and can confirm that all visited rural households had installed an open deep pit for manure storage which is only emptied in average once in 6 months. As this can be further checked during onsite visit for each CPA inclusion the DOE deems this criterion as sufficient.

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Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
6.3	currently use coal as source of energy for cooking.	To allow the identical application of the baseline and monitoring methodologies to all households, only households with an existing pit for manure storage are accepted.	Written statement from SREO after choosing the households for the PoA.	<input checked="" type="checkbox"/>	This criterion refers to the baseline identification and constant application of the same to each individual measure during monitoring. Further in combination with criteria 5.1 it contributes to the homogeneousness of the CPAs and therefore to the sampling method applied during inclusion and verification. Only households which used coal prior to the installation of the digester are allowed under this PoA. This is crosschecked by written statement and confirmation by SREO ^{CON/} . Further DOE has checked this during onsite validation of the PoA and can confirm that all visited rural households used raw coal to satisfy their energy demand for cooking. As this can be further checked during onsite visit for each CPA inclusion the DOE deems this criterion as sufficient.
6.4	install a new household biogas system, considering the relevant technical standards.	To ensure that all households actually generate emission reductions, it has to be ensured that the planned technology is actually installed at the programme's households.	<ul style="list-style-type: none"> Written statement by the technology implementer (SREO). All applicable and latest versions of the standards listed	<input checked="" type="checkbox"/>	This criterion refers to that real emission reductions are achieved and leakage is neglected. Leakage must be considered in case any equipment is transferred from outside into the project boundary or from the project boundary. This can be neglected if it is ensured that only newly built or constructed/installed equipment is used under the PoA. This is ensured by written confirmation by Sichuan Rural Energy Office. Therefore this criterion is deemed sufficient.

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
			in Table 1 of the PoA-DD.		
6.5	Are considered low-income households	The PoA focuses on poor households. Therefore only low income households should be chosen for the PoA.	<ul style="list-style-type: none"> Written statement from SREO after choosing the households for the PoA. 	<input checked="" type="checkbox"/>	This criterion refers to the stated goal of the PoA to enable the poor population of the rural areas in Sichuan to participate in the existing biogas subsidy programme. The written statement by SREO is provided to confirm that each household under this PoA has a per capita income below the rural population average according to latest statistical yearbook. The criterion to define a low-income household is as following: A household is considered low-income in case the per capita income is below the rural population's average income according to the latest statistical yearbook ^{/STY/} available at time of CPA validation. The statistical yearbook is a publicly available source. Currently the rural population average income per capita is RMB 4,534.18 (equivalent to about 541.5 Euro at an exchange rate of 1 Euro = 8.3734 RMB [2012-04-03]), which is the per capita income as per Sichuan Statistical yearbook 2009 ^{/STY/} . The Sichuan Rural Energy Office applies this criterion to determine whether a household qualifies to be included in the PoA. SREO will already exclude households which have an average income above the principle as introduced

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
					above. Therefore after SREO has checked according to the principle introduced, SREO confirms that all project households are low-income households. Further, this can and will be substantiated during onsite visit by DOE during CPA inclusion. As per Sampling plan the DOE will conduct visits to defined number of project households and households from a contrast group. During this visit a interviews with households from the contrast group will be conducted where the income is asked. The contrast group consists of households which have installed a digester with only the related government subsidy and without additional support via CDM. By the definition and the conducted visits to the two defined groups and by asking for the income directly from the households it can be sufficiently ensured and demonstrated that only households which fulfill this criterion are part of this PoA. The DOE has checked this issue during onsite interview with more than 100 households ^{/IM03/} : As the SREO as official governmental entity provides a written statement on the same and as this could be checked during each CPA inclusion DOE deems this criterion as sufficient.
6.6	No recovery or combustion equipment is transferred from or	Leakage due to replacement of	• Written statement on	<input checked="" type="checkbox"/>	This criterion refers to §11 of AMS.III.R (version 2) and §47 of AMS.I.C (version 19) and is deemed appropriate.

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
	to other activities	equipment should be avoided. The transferring of an existing digester from one activity to another is technically not feasible as the digesters are built of bricks and concrete.	household advice by the technology implementer (SREO).		In combination with criterion 6.4 and as each digester has an individual ID as well as based on written confirmation by SREO it can be crosschecked whether any equipment is transferred to or from the project boundary. Therefore this criterion is deemed ok.
7.	Each of the independent subsystems (the digesters and biogas stoves) is no larger than 1% of the small-scale thresholds defined by the methodologies applied (600 tCO ₂ e emission reduction from methane avoidance, 150 kW thermal installed capacity of the stoves).	<p>This criterion is applied to discuss whether the CPAs are a de-bundled component of a large scale CDM project.</p> <p>To check the thermal capacity, a biogas stove test report will provide the stove capacity.</p> <p>To emission reductions calculated using the formulas derived in Annex 3.3 will be compared to the limit of</p>	<ul style="list-style-type: none"> • SSC-CPA-DD • Thermal capacity: <ul style="list-style-type: none"> ○ Biogas stove test report • Methane avoidance: <ul style="list-style-type: none"> ○ Baseline survey ○ ER calculation 	☒	<p>This criterion 7 is to ensure the CPA exemption from debundling requirement EB 54 Annex 13 paragraph 10, and is deemed sufficient.</p> <p>The biogas stove test report provided by an independent third party entity can be crosschecked to ensure that the thermal capacity of the biogas stove is below 150 kW. Further the emission reduction calculation spreadsheet and the baseline survey can be used to crosscheck that each individual measure is below the threshold limit of 600 tCO₂e emission reductions from methane avoidance.</p>

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		600 tCO ₂ e. According to the analysis carried out in A.4.4.1, this criterion is automatically fulfilled, if no household raises more than 2,060 pigs at the same time (which is far beyond the technical capacity of household biogas digesters). This will be demonstrated using a representative survey.			
8.	The proposed project and the new CPA do not lead to a diversion of official development assistance (ODA).	Avoidance of CDM leading to a diversion of official development assistance.	<ul style="list-style-type: none"> Written letters to state that neither the CDM development process, nor the sources of any applicable national biogas subsidy are funded by ODA. 	<input checked="" type="checkbox"/>	The criterion 8 sufficiently covers the public funding requirement from the UNFCCC and the proposed confirmation letter is deemed appropriate to demonstrate the compliance to the criterion.

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
9.	The CPA implements a monitoring plant that is in line with the monitoring plan described in the PoA-DD (section E.7.2)	The monitoring plan of each CPA should be in line with the monitoring plan validated by the DOE and registered with the PoA.	<ul style="list-style-type: none"> SSC-PoA-DD SSC-CPA-DD 	<input checked="" type="checkbox"/>	This criterion ensures that the monitoring plan as per PoA-DD is consistently applied in each CPA.
10.	The start date of the CPA is not before the date of public web hosting of the PoA documentation		<ul style="list-style-type: none"> 		<p>This criterion refers to EB 55 Annex 38 §7 (c) to ensure that the start date of the CPA is not prior to the publication of the PoA for global stakeholder consultation.</p> <p>This can be sufficiently checked by the acceptance records prepared after completion of system installation. For those which are not finished this criterion is obviously met and can be crosschecked by onsite visit and date of contract signing for construction. Therefore this criterion is deemed sufficient.</p>
10.1	The start date of the CPA can be determined with suitable evidence.	Requirement of EB 65, Annex 3	<ul style="list-style-type: none"> City and County REO household list with all digester construction dates. 	<input checked="" type="checkbox"/>	This criterion refers to EB 65 Annex 3 to ensure that the start date of the CPA is supported by evidence. This can be sufficiently checked by the list of all households including the construction dates ^{/LIST/} . Besides this can be reviewed by the acceptance records prepared after completion of system installation for those who are finished.

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
10.2	The start date of the CPA is not before the start date of public web hosting of the PoA documentation (28/10/2010)	Requirement introduced by EB55, Annex 38.	<ul style="list-style-type: none"> City and County REO household list with all digester construction dates. 	<input checked="" type="checkbox"/>	<p>This criterion refers to EB 55 Annex 38 §7 (c) to ensure that the start date of the CPA is not prior to the publication of the PoA for global stakeholder consultation.</p> <p>This can be sufficiently checked by the household list^{LIST/} which contains all construction dates and the acceptance records prepared after completion of system installation. For those which are not finished this criterion is obviously met and can be crosschecked by onsite visit and date of contract signing for construction. Therefore this criterion is deemed sufficient.</p>
11.	The end date of the CPA does not exceed the PoA end date.	The CPAs will automatically be terminated when the PoA reached the end of its end date.	<ul style="list-style-type: none"> SSC-CPA-DD 	<input checked="" type="checkbox"/>	<p>This criterion 11 requires CPA crediting period not exceed the PoA end, which is in line with the UNFCCC requirement and is deemed sufficient.</p> <p>The information will be included in the CPA-DD and checked against the registration date of the PoA plus 28 years.</p>
12.	The CPA meets the additionality criteria relevant for Type I.				
12.1	The total thermal capacity installed at all households of the CPA does not exceed 15 MW _{th} .	A test record of the typical biogas stoves will be provided as evidence during the	<ul style="list-style-type: none"> Test record of implemented stoves 	<input checked="" type="checkbox"/>	<p>This criterion 12.1 refers to applicability requirements of EB 60 Annex 25 §2 and is deemed appropriate.</p> <p>As each CPA is designed in a way to comply with the threshold limits of EB60 Annex 25 for demonstration of</p>




PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
		inclusion. The number of households should not exceed the maximum capacity of 15 MW _{th} divided by the capacity of one stove.	<ul style="list-style-type: none"> CPA household list 		<p>additionality for microscale project activities and the related microscale threshold is 15MW_{th}. This can be crosschecked with number of households as provided in corresponding CPA-DD and biogas stove test report. The multiplication of both shall be less than 15 MW_{th}. Therefore the DOE considers this criterion as sufficient.</p>
12.2	The thermal capacity of a single stove does not exceed 4,500 kW _{th} .	Requirement of the <i>Guidelines for demonstrating additionality of microscale project activities.</i>	<ul style="list-style-type: none"> Test record of implemented stoves 	<input checked="" type="checkbox"/>	<p>This criterion refers to EB 60 Annex 25 § 2 c. i. and is deemed appropriate. As each of the individual systems installed has to comply with the limits as per criterion 7, were each single stove has to have a thermal capacity below 150 kW, if criterion 7 is met this criterion is met. Further this can be crosschecked with the biogas stove test record. Therefore this criterion is sufficient.</p>
12.3	The users of the subsystems will be households.	Requirement of the <i>Guidelines for demonstrating additionality of microscale project activities.</i>	<ul style="list-style-type: none"> CPA household list 	<input checked="" type="checkbox"/>	<p>This criterion refers to EB 60 Annex 25 § 2 c. ii. and is deemed appropriate. During onsite validation of the PoA DOE has visited more than 100 rural households and can therefore confirm that the users of the subsystem are households. This can be crosschecked for each single CPA by site observation of a sample groupe besides by the provided</p>

PP Demonstration				DOE Assessment	
Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
					household listing. Therefore the DOE deems this criterion as sufficiently addressed.
13.	The CPA meets the criteria relevant for Type III.	Requirement of the <i>Guidelines for demonstrating additionality of microscale project activities.</i>			
13.1	The total annual emission reduction from methane avoidance (type II activity) aimed by the CPA does not exceed 20 ktCO ₂ e in any year of the crediting period.	Requirement of the <i>Guidelines for demonstrating additionality of microscale project activities.</i>	<ul style="list-style-type: none"> SSC-CPA-DD Baseline survey Contracts signed by households 	<input checked="" type="checkbox"/>	This criterion refers to EB 60 Annex 25 § 4 and is deemed appropriate. The emission reductions calculation along with the baseline survey and the number of contracts signed with each individual household can be used to crosscheck the compliance with the limit of 20 ktCO ₂ e emission reduction besides as per CPA-DD section A.4.4. Therefore this criterion is deemed ok.
13.2	The annual emission reduction from methane avoidance (type II activity) of one single household does not exceed 600 tCO ₂ e.	To emission reductions calculated using the formulas derived in Annex 3.3 of the PoA-DD will be compared to the limit of 600 tCO ₂ e.	<ul style="list-style-type: none"> SSC-CPA-DD Baseline survey Contracts signed by 	<input checked="" type="checkbox"/>	This criterion refers to EB 60 Annex 25 § 4 b. i. and is deemed appropriate. See criterion 7 above.

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Nr.	Eligibility Criteria	Further Elaboration	Minimum Expected Evidence(s) to be provided during CPA inclusion	Appropriate and sufficient	Explanation of final result
			households		
13.3	The users of the subsystems will be households.	Requirement of the <i>Guidelines for demonstrating additionality of microscale project activities.</i>	<ul style="list-style-type: none"> CPA household list 	<input checked="" type="checkbox"/>	This criterion refers to EB 60 Annex 25 § 4 b. ii. and is deemed appropriate. See criterion 12.3 above.
14.	All CPA specific input parameters that are determined by sampling have been determined by a survey that is based on the validated sampling plan and fulfils the minimum confidence/error of 95/10 for surveys combining several CPAs or 90/10 for surveys that cover only single CPAs.	The data quality of the sampling survey should meet the minimum requirements.	<ul style="list-style-type: none"> Statistical survey analysis. 	<input checked="" type="checkbox"/>	This criterion refers to EB 65 Annex 3 §14 (j) and is deemed appropriate. This could be checked against provided monitoring and baseline survey ^{/BS/MS/} submitted for each CPA at time of CPA inclusion. According to the methods specified in section A.4.4.2 and E. 7.2 of the PoA-DD, statistically sound sampling methods and procedures to be used by DOEs for inclusion and verification of ERs achieved by CPAs under the PoA have been defined. A dedicated Monitoring Sampling Plan ^{/SP/} has been developed by the CME. Therefore this criterion and establishment is deemed ok to ensure the stated confidence/error level.

¹⁾ In case clarifications have been requested by the validation team corresponding rows shall be added

ANNEX 7: APPOINTMENT CERTIFICATES OF TEAM MEMBERS

 <p style="text-align: center;">Statement of Competence Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program</p> <p style="text-align: center;">Mr. Rainer Winter</p> <table border="1"> <thead> <tr> <th>SCHEME</th> <th>STATUS</th> <th>VALID UNTIL</th> </tr> </thead> <tbody> <tr> <td rowspan="2">CDM</td> <td>Senior Assessor (Validation, Verification)</td> <td rowspan="2">2013-07-03</td> </tr> <tr> <td>Technical Reviewer</td> </tr> <tr> <td>Ji</td> <td>Senior Assessor Technical Reviewer</td> <td>2013-07-03</td> </tr> <tr> <td rowspan="2">VCS</td> <td>Senior Assessor</td> <td rowspan="2">2013-07-03</td> </tr> <tr> <td>Technical Reviewer</td> </tr> </tbody> </table> <p style="text-align: center;"><small>Authorization status for technical areas within sectoral scopes:</small></p> <table border="1"> <thead> <tr> <th>CODE</th> <th>TECHNICAL AREA</th> <th>TR SUBCATEGORIES</th> </tr> </thead> <tbody> <tr> <td rowspan="3">1.1</td> <td 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Reviewer	2014-06-30	CODE	TECHNICAL AREA	TR SUBCATEGORIES	1.1	Thermal energy generation	1.2.1 Hydro	1.2.2 Wind	1.2.3 Geothermal	1.2	Renewable Energy	1.2.4 Solar	1.2.5 Tidal		2.2	Heat distribution		3.1	Energy demand		13.1	Waste handling and disposal	13.1.1 Waste management	13.1.2 Waste water management	13.2	Animal waste management		15.2	Animal waste management	
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Statement of Competence

Appointment and authorization according to the procedures
 of the TÜV NORD JI/CDM Certification Program

Mr. Heiner Lenzian

SCHEME	STATUS	VALID UNTIL
CDM	Lead Assessor (Validation, Verification)	2014-12-12
	Technical Reviewer	
VCS	Lead Assessor (Validation, Verification)	2014-12-12
	Technical Reviewer	

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA	TR SUBCATEGORIES
1.2	Renewable Energies	1.2.1 Hydro
		1.2.2 Wind
		1.2.3 Geothermal
		1.2.4 Solar
		1.2.5 Tidal

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210_2014F00_2011-12-13_en2.doc

501-F00-rev1 | 2011-08-02



CERTIFICATE OF APPOINTMENT

Ms. Jun Wang

born on 1982-08-10

satisfies the requirements as specified in the TÜV NORD
 JI/CDM CP directives and is hereby appointed as

TÜV NORD CDM Lead Assessor

The present appointment will terminate on 2013-11-19
 Certification registration No. 10 11 08 – 126 rev1

Essen, 2010-11-20



Head of TÜV NORD JI/CDM Certification Program
 of TÜV NORD CERT GmbH