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# Validation Report

**Climate Change Capital Limited**

VALIDATION OF THE CDM-PROJECT:  
STRAW GENERATION PROJECT IN WEI COUNTY  
HEBEI PROVINCE, P.R. CHINA

REPORT NO. 969539

**2008, January 16**

TÜV SÜD Industrie Service GmbH  
Carbon Management Service  
Westendstr. 199 - 80686 Munich – GERMANY

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<b>Subject:</b> Validation of a CDM Project	
<b>Accredited TÜV SÜD Unit:</b> TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 - 80686 Munich FEDERAL REPUBLIC OF GERMANY	<b>TÜV SÜD Contract Partner:</b> Jiangsu TÜV Product Service Shanghai Branch 16 F West Building, New Hualian Mansion No. 775 Huaihai Road, Shanghai P.R. China
<b>Client:</b> Climate Change Capital Limited 49 Grosvenor Street W1K 3HP London	<b>Project Site(s):</b> Heying town, Wei County Hebei province People's Republic of China
<b>Project Title:</b> Straw generation project in Wei county Hebei province, P.R. China	
<b>Applied Methodology / Version:</b> ACM0006 version 04	<b>Scope(s):</b> 1
<b>First PDD Version:</b> Date of issuance: 2006-11-28 Version No.: 1 Starting Date of GSP 2006-12-20	<b>Final PDD version:</b> Date of issuance: 2007-12-03 Version No.: 3.4
<b>Estimated Annual Emission Reduction:</b> 130 638 tons CO <sub>2e</sub>	
<b>Assessment Team Leader:</b> Dr. Sven Kolmetz	<b>Further Assessment Team Members:</b> Cuiyun Zhang
<b>Summary of the Validation Opinion:</b> <p><input checked="" type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board in case letters of approval of all Parties involved will be available before the expiring date of the applied methodology(ies) or the applied methodology version respectively.</p> <p><input type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the project for registration by the CDM Executive Board and will inform the project participants and the CDM Executive Board on this decision.</p>	

## Abbreviations

<b>ACM</b>	Approved Consolidated Methodology
<b>AM</b>	Approved Methodology
<b>CAR</b>	Corrective Action Request
<b>CDM</b>	Clean Development Mechanism
<b>CER</b>	Certified Emission Reduction
<b>CR</b>	Clarification Request
<b>DNA</b>	Designated National Authority
<b>DOE</b>	Designated Operational Entity
<b>EB</b>	Executive Board
<b>EIA / EA</b>	Environmental Impact Assessment / Environmental Assessment
<b>ER</b>	Emission reduction
<b>GHG</b>	Greenhouse gas(es)
<b>KP</b>	Kyoto Protocol
<b>MP</b>	Monitoring Plan
<b>NGO</b>	Non Governmental Organisation
<b>PDD</b>	Project Design Document
<b>PP</b>	Project Participant
<b>TÜV SÜD</b>	TÜV SÜD Industrie Service GmbH
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>VVM</b>	Validation and Verification Manual

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Annex 1: Validation Protocol

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## 1 INTRODUCTION

### 1.1 Objective

The validation objective is an independent assessment by a Third Party (Designated Operational Entity = DOE) of a proposed project activity against all defined criteria set for the registration under the Clean Development Mechanism (CDM). Validation is part of the CDM project cycle and will finally result in a conclusion by the executing DOE whether a project activity is valid and should be submitted for registration to the CDM-EB. The ultimate decision on the registration of a proposed project activity rests at the CDM Executive Board and the Parties involved.

The project activity discussed by this validation report has been submitted under the project title:

Straw generation project in Wei county Hebei province, P.R. China

### 1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of CDM project activities the scope is set by:

- The Kyoto Protocol, in particular § 12
- Decision 2/CMP1 and Decision 3/CMP.1 (Marrakech Accords)
- Further COP/MOP decisions with reference to the CDM (e.g. decisions 4 – 8/CMP.1)
- Decisions by the EB published under <http://cdm.unfccc.int>
- Specific guidance by the EB published under <http://cdm.unfccc.int>
- Guidelines for Completing the Project Design Document (CDM-PDD), and the Proposed New Baseline and Monitoring Methodology (CDM-NM)
- The applied approved methodology
- The technical environment of the project (technical scope)
- Internal and national standards on monitoring and QA/QC
- Technical guideline and information on best practice

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

Once TÜV SÜD receives a first PDD version, it is made publicly available on the internet at TÜV SÜD's webpage as well as on the UNFCCC CDM-webpages for starting a 30 day global stakeholder consultation process (GSP). In case of any request a PDD might be revised (under certain conditions the GSP will be repeated) and the final PDD will form the basis for the final evaluation as presented by this report. Information on the first and on the final PDD version is presented at page 1.

The only purpose of a validation is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.

## 2 METHODOLOGY

The project assessment aims at being a risk based approach and is based on the methodology developed in the Validation and Verification Manual, an initiative of Designated and Applicant Entities, which aims to harmonize the approach and quality of all such assessments.

In order to ensure transparency, a validation protocol was customised for the project. TÜV SÜD developed a “cook-book” for methodology-specific checklists and protocol based on the templates presented by the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), the discussion of each criterion by the assessment team and the results from validating the identified criteria. The validation protocol serves the following purposes:

- It organises, details and clarifies the requirements a CDM project is expected to meet;
- It ensures a transparent validation process where the validator will document how a particular requirement has been validated and the result of the validation.

The validation protocol consists of three tables. The different columns in these tables are described in the figure below.

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

<b>Validation Protocol Table 1: Conformity of Project Activity and PDD</b>				
<b>Checklist Topic / Question</b>	<b>Reference</b>	<b>Comments</b>	<b>PDD in GSP</b>	<b>Final PDD</b>
<i>The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then further subdivided. The lowest level constitutes a checklist question / criterion.</i>	<i>Gives reference to documents where the answer to the checklist question or item is found in case the comment refers to documents other than the PDD.</i>	<i>The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached. In some cases sub-checklist are applied indicating yes/no decisions on the compliance with the stated criterion. Any <b>Request</b> has to be substantiated within this column</i>	<i>Conclusions are presented based on the assessment of the first PDD version. This is either acceptable based on evidence provided (☑), or a <b>Corrective Action Request (CAR)</b> due to non-compliance with the checklist question (See below). <b>Clarification Request (CR)</b> is used when the validation team has identified a need for further clarification.</i>	<i>Conclusions are presented in the same manner based on the assessment of the final PDD version.</i>



<b>Validation Protocol Table 2: Resolution of Corrective Action and Clarification Requests</b>			
<b>Clarifications and corrective action requests</b>	<b>Ref. to table 1</b>	<b>Summary of project owner response</b>	<b>Validation team conclusion</b>
<i>If the conclusions from table 1 are either a Corrective Action Request or a Clarification Request, these should be listed in this section.</i>	<i>Reference to the checklist question number in Table 1 where the Corrective Action Request or Clarification Request is explained.</i>	<i>The responses given by the client or other project participants during the communications with the validation team should be summarised in this section.</i>	<i>This section should summarise the validation team's responses and final conclusions. The conclusions should also be included in Table 1, under "Final PDD".</i>

In case of a denial of the project activity more detailed information on this decision will be presented in table 3.

<b>Validation Protocol Table 3: Unresolved Corrective Action and Clarification Requests</b>		
<b>Clarifications and corrective action requests</b>	<b>Id. of CAR/CR 1</b>	<b>Explanation of the Conclusion for Denial</b>
<i>If the final conclusions from table 2 results in a denial the referenced request should be listed in this section.</i>	<i>Identifier of the Request.</i>	<i>This section should present a detail explanation, why the project is finally considered not to be in compliance with a criterion.</i>

## 2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body “climate and energy”. The composition of an assessment team has to be approved by the Certification Body ensuring that the required skills are covered by the team. The Certification Body TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL)
- Greenhouse Gas Auditor (GHG-A)
- Greenhouse Gas Auditor Trainee (T)
- Experts (E)

It is required that the sectoral scope linked to the methodology has to be covered by the assessment team.

The validation team was consisting of the following experts (the responsible Assessment Team Leader is written in bold letters):

Name	Qualification	Coverage of technical scope	Coverage of sectoral expertise	Host country experience
Dr. Sven Kolmetz	ATL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Cuiyun Zhang	A			<input checked="" type="checkbox"/>

**Dr. Sven Kolmetz** is physicist and auditor at the department “TÜV Carbon Management Service” located in the head office of TÜV Süd Industrie Service GmbH in Munich. Furthermore he is officially authorized expert in the verification of GHG emissions in the framework of the European Emission Trading Scheme. Before entering TÜV SÜD he worked as energy consultant for industrial companies and as consultant for the German Federal Government on instruments for the reduction of GHG emissions.

**Cuiyun Zhang** is an auditor for environmental management systems (according to ISO 14001) at Jiangsu TUV Product Service Ltd. She is based in Shanghai. In her position she is responsible for the implementation of validation, verification and certifications audits for management systems. She has received training in the CDM validation process and participated already in several CDM project assessments.

## 2.2 Review of Documents

The first PDD version submitted by the client and additional background documents related to the project design and baseline were reviewed as initial step of the validation process. A complete list of all documents and proofs reviewed is attached as annex 2 to this report.



## 2.3 Follow-up Interviews

In the period of January 31<sup>st</sup>, 2007 TÜV SÜD performed interviews on-site with project stakeholders to confirm selected information and to resolve issues identified in the first document review. The table below provides a list of all persons interviewed in the context of this on-site visit.

Name	Organisation
Mr. Xiao Bin	National Bio Energy Co., Ltd. CDM Manager
Mr. Ren Hongbo	National Bio Energy Co., Ltd. Vice General Manager
Mr. Zhao Zhizhong	National Bio Energy Co., Ltd. Manager of Biomass Department
Ms. Ren Lingsu	National Bio Energy Co., Ltd. Financial Manager
Mr. Fan Rui	National Bio Energy Co., Ltd. CDM Assistant
Mr. Li Jianfei	National Bio Energy Co., Ltd. Administration Manager
Mr. Hu Fan	National Bio Energy Co., Ltd. Consultant

## 2.4 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to resolve the requests for corrective actions and clarifications and any other outstanding issues which needed to be clarified for TÜV SÜD's positive conclusion on the project design. The Corrective Action Requests and Clarification Requests raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the validation process, the concerns raised and responses that have been given are summarised in chapter 3 below and documented in more detail in the validation protocol in annex 1.

## 2.5 Internal Quality Control

As final step of a validation the validation report and the protocol have to undergo an internal quality control procedure by the Certification Body "climate and energy", i.e. each report has to be approved either by the head of the certification body or his deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one.

It rests at the decision of TÜV SÜD's Certification Body whether a project will be submitted for re-requesting registration by the EB or not.

## 3 SUMMARY OF FINDINGS

The following description of the project as per PDD could be verified during the on-site audit:

### Project Description

The proposed project is located in Wei county, Hebei province, generating by utilizing cotton straw as fuel. The install capacity of this project is 1×25 MW and the water-cooling librated boiler of 1×130 t/h will be installed in the project. The annual straws' consumption is about 119,792 t, and 126,500 MWh electricity will be expected to deliver annually to North China Power Grid (NCPG).

When the proposed project is put into operation, the GHG emission reductions are from two components. Firstly, it will substitute some electricity generation of Northern China Power Grid dominated by fossil fuel electricity, and thus will reduce the coal consumption. Secondly, the proposed project will use straw in high efficiency, which will reduce CH<sub>4</sub> emissions because the biomass is dumped or left to decay or burned in an uncontrolled manner in the absence of the proposed project.

### Findings

As informed above all findings are summarized in table 2 of the attached validation protocol.

In total the assessment team expressed 9 Clarification Requests and 22 Corrective Action Requests:

The required documents (English version of the IRR calculation excel sheet, benchmark) have been submitted to the DOE and the more formal aspects of the proposed project (project specific location, crediting period etc.) have been added to the PDD finally. Hence, most of the CAR and CR were resolved very easily.

The required formal changes have been made:

- The starting date and mistake of unit and IRR calculation have been revised in the final version of the PDD [CAR1, 6, 7].
- The on-site use of electricity and combustion emission with the correlative formulas are added in to the PDD [CAR 2, 3, 4, 9].
- The necessary parameters according to methodology in B.6.2 Table and its following segments are given and revised in detail [CAR 10 to 20].
- The latest information for the EIA of the project has been delivered [CAR 21, 22].

Above all, the CAR's are resolved accordingly.

Training proof has been provided to the DOE [CR3] and the corresponding details about the required standards and the measurement accuracy of particular parameters (utilization of only cotton straw and its  $NCV_c$ ) according to the project description and methodology have also been proved [CR 1, CR 4 to 9].

### **Baseline**

For the BM calculation the PDD adopts modified methods agreed by the EB for the approved methodologies AM0005 and AMS I.D. because plant specific data are not available in China. The emission factor of the thermal power plants is calculated by the proportion of the emissions of coal, gas and oil times the emission factor of the best available coal, gas and oil power plant as defined and published by the Chinese DNA. The new thermal capacity installation that exceeds 20% in the last years, for which data are available, is finally assessed with this factor.

### **Additionality**

The additionality has been evidenced by investment analysis. The benchmark used (IRR) and the IRR calculation will be uploaded together with the PDD, mistakes of the IRR calculation have already been fixed. The figures presented in the PDD and the IRR calculation has been checked by verifying the original documents during the on-site audit (see annex 2, such as the approved feasibility report and the purchase agreement for the main equipment). The early consideration of CDM has been evidenced by the ERPA and the deed of exclusivity between the project owner and the buyer for several biomass projects (see annex 2, ref. 39 and 40).

In conclusion, the project complies with the requirements.

## 4 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

TÜV SÜD published the project documents on UNFCCC website by installing a link to TÜV SÜD's own website and invited comments by Parties, stakeholders and non-governmental organisations during a period of 30 days.

The following table presents all key information on this process:

<b>webpage:</b> <a href="http://www.netinform.de/KE/Wegweiser/Guide2_1.aspx?ID=2405&amp;Ebene1_ID=26&amp;Ebene2_ID=715&amp;mode=1">http://www.netinform.de/KE/Wegweiser/Guide2_1.aspx?ID=2405&amp;Ebene1_ID=26&amp;Ebene2_ID=715&amp;mode=1</a>	
<b>Starting date of the global stakeholder consultation process:</b> 2006-12-20	
<b>Comment submitted by:</b> none	<b>Issues raised:</b> -
<b>Response by TÜV SÜD:</b> -	

## 5 VALIDATION OPINION

TÜV SÜD has performed a validation of the following proposed CDM project activity:

Straw generation project in Wei county Hebei province, P.R. China.

The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the project for registration by the CDM Executive Board.

An analysis as provided by the applied methodology demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions as specified within the final PDD version.

The validation is based on the information made available to us and the engagement conditions detailed in this report. The validation has been performed using a risk based approach as described above. The only purpose of this report is its use during the registration process as part of the CDM project cycle. Hence, TÜV SÜD can not be held liable by any party for decisions made or not made based on the validation opinion, which will go beyond that purpose.


Munich, 2008-01-16



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Certification Body "climate and energy"  
TÜV SÜD Industrie Service GmbH

Munich, 2008-01-16



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Assessment Team Leader

Validation of the CDM Project:

Straw generation project in Wei county Hebei province, P.R. China

P.R. China



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## **Annex 1: Validation Protocol**

## Validation Protocol

Project Title: Straw generating project in Wei County Hebei Province, P.R. China

Date of Completion: Jan. 16<sup>th</sup>, 2008

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**Table 1 Conformity of Project Activity and PDD**

CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
<b>A. General description of project activity</b>				
<b>A.1. Title of the project activity</b>				
A.1.1. Does the used project title clearly enable to identify the unique CDM activity?	1, 28	The project activity is a grid-connected electricity generation through firing biomass. The title of the project could not present the CDM activity clearly. However, considering the Letter of Approval the project has been issued under this title by the host country and the possibility of recurrence using the same title in the same area by a similar project is extremely low. The audit team believes the project could be identified by the current title.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.1.2. Are there any indication concerning the revision number and the date of the revision?	1, 28	The version used for on site audit and document review is 1.0 which has been accomplished on Nov. 28 <sup>th</sup> , 2006.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.1.3. Is this consistent with the time line of the project's history?	1, 28	This is the first and only one at validator's desk while preparing the protocol. Moreover, the PDD with the same version is used for GSP since Dec. 20 <sup>th</sup> , 2006	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>A.2. Description of the project activity</b>				
A.2.1. Is the description delivering a transparent overview of the project activities?	1, 28	<p>The project activity comprises the installation of a new power plant at Wei County, Hubei Province, where currently no power generation occurs and the biomass is dumped or left to decay or burned in uncontrolled manner in the absence of the proposed project. The power produced will be fed into the North China Power Grid; the heat generated will not be considered by the calculation of emission reductions.</p> <p><u>Clarification Request 1:</u></p> <ul style="list-style-type: none"> <li>- Introduced by the project owner on site, the cotton straw will be the only biomass resource utilized by the project</li> </ul>	CR 1	<input checked="" type="checkbox"/>

## Validation Protocol

Project Title: Straw generating project in Wei County Hebei Province, P.R. China

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CHECKLIST TOPIC / QUESTION		Ref.	COMMENTS	PDD in GSP	Final PDD
			<p>activity, however, as stated in Table B.2 of the PDD, the corn straw will also be used. Pls. clarify which biomass residues will be utilized in the revised PDD.</p> <ul style="list-style-type: none"> <li>- Pls. deliver the reliable evidence to the auditor that the yearly consumption of straw is 136,100t and what's the moisture content of it?</li> </ul>		
A.2.2.	What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?	1, 28, 14, 15, 8, 10, 26, 27	<p>The project activity is the displacement of electricity generated by coal fired power plants with electricity generated by biomass residues. The following documents deliver evidences for the project activity:</p> <ul style="list-style-type: none"> <li>- Purchasing contract of boiler, turbine and generator;</li> <li>- Feasibility Study Report (approved by Hebei Development and Reform Commission on in Mar., 2006)</li> <li>- Environmental Impact Assessment (approved by the EPB of Hebei Province on Mar. 29<sup>th</sup>, 2006)</li> <li>- The layout of all 74 collection stations of biomass and the agreements with the station owners (two of them have been visited during the on site audit)</li> </ul>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2.3.	Is the information provided by these proofs consistent with the information provided by the PDD?	1, 28	Pls. see CR 1, the depiction of section A.2. of the PDD shall be revised or corrected.	See CR 1	<input checked="" type="checkbox"/>
A.2.4.	Is all information presented consistent with details provided by further chapters of the PDD?	1, 28	Pls. refer to CR 1, the statement of which biomass residue is used for the project activity is not consistent in section A.2. and B.2.. A Clarification needs to be made.	See CR 1	<input checked="" type="checkbox"/>
<b>A.3. Project participants</b>					
A.3.1.	Is the form required for the indication of project participants correctly applied?	1, 28	Yes, the required form is correctly applied.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



## Validation Protocol

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
A.3.2. Is the participation of the listed entities or Parties confirmed by each one of them?		Both Climate Change Capital Carbon Fund II s.à r.l. and Climate Change Capital Carbon Managed Account are the investment parties. From the host country, National Bio Energy Co., Ltd. is the project owner. All parties have been confirmed by the project owner on site. <u>Open Issue:</u> Pls. deliver the LoA issued by P.R. China and United Kingdom together with MoC countersigned by 3 parties to DOE before raising the request of registration.	Open Issue	<input checked="" type="checkbox"/>
A.3.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of the PDD (in particular annex 1)?	1, 28	The information of participants is consistent through the whole PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>A.4. Technical description of the project activity</b>				
<b>A.4.1. Location of the project activity</b>				
A.4.1.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	1, 28, 5	The location of project is not clearly described in the PDD, pls. kindly add the following information into section A.4.1. of the PDD. <u>Clarification Request 2:</u> <ul style="list-style-type: none"> <li>- Having regard to the possibility that there are more than one county named Wei in Hebei Province, pls. kindly add the city name into the description;</li> <li>- Pls. add the exact geographical coordinates;</li> <li>- For the purpose of being understood well, please use maps marked with English.</li> </ul>	CR 2	<input checked="" type="checkbox"/>
A.4.1.2. How is it ensured and/or demonstrated, that the project proponents can implement	1, 5, 28,	Besides the review of official documents mentioned above, a visiting to power plant and biomass collection sites was executed by	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
the project at this site (ownership, licenses, contracts etc.)?	14, 15, 8, 10, 26, 27	auditor in January of 2007. The collection stations have all been in operation since last year. Furthermore, the construction and installation of power plant have been accomplished. The generation of electricity is expected to be in Feb., 2007. Hence, the validation team has the confidence to implement the project at the site defined in the PDD.		
<b>A.4.2. Category(ies) of project activity</b>				
A.4.2.1. Which category(ies) does the project activity belong to? Is the category correctly identified and indicated?	1, 28	Yes, the project refers to scope 1. It is clearly indicated in section A.4.2. of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>A.4.3. Technology to be employed by the project activity</b>				
A.4.3.1. Does the technical design of the project activity reflect current good practices?	1, 28	The proposed project installs a boiler with high temperature and high pressure. The equipment and technology are imported from Denmark, BWE Company which provides a technology with the advantage of no knotting residue and burning completely. Moreover, it has been successfully operated in some European countries, such as Denmark, UK and Germany etc.. The Turbine and the generator are supplied by Qingdao Jieneng Turbine Co., Ltd. and Shandong Jinan Generator Co., Ltd. respectively. Both of them are also the lead companies in turbine-generator industry in China.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.2. Does the description of the technology to be applied provide sufficient and transparent input/ information to evaluate its impact on the greenhouse gas balance?	1, 28	The PDD provides an overview of the implemented technology which enables the conversion from biomass residue to electricity generation. The produced power will be the substitution of grid supplied electricity mainly from coal fired plants. There's no doubt that the proposed project will reduce GHG emissions significantly.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.3. Does the implementation of the project activity require any technology transfer from annex-I-countries to the host country(ies)?	1, 28	The implemented technology is developed by BWE, a Danish company. Therefore, the technology transfer is definitely required.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

## Validation Protocol

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
A.4.3.4. Is the technology implemented by the project activity environmentally safe?	1, 28	According to the approved EIA, the proposed project will not cause a negative impact to the environment.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.5. Is the information provided in compliance with actual situation or planning?	1, 28	The purchasing contracts and equipments installed on site all prove the description in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.6. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	1, 28	With the advantages of high efficiency and no knotting residue, this technology has been successfully operated for years in several European countries. Doubtlessly, state of the art technology is implemented in the proposed project.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.7. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	1, 28	We do not expect that there will be a substitution because the boiler, turbine and generator will be newly commissioned and installed. The life cycles of the boiler and the turbine are under normal circumstances longer than the project period.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.8. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?	1, 28	<p>In regard to the advanced technology which is implemented in this project, extensive initial training is needed to guarantee safe operation during the life time.</p> <p><u>Clarification Request 3:</u></p> <p>As introduced by the project owner, the related training has been provided, however, the evidence is not available during the on site assessment. Please submit the training proof, such as, training material, training contract, participant list, course agenda etc., to the audit team for a review.</p>	CR 3	<input checked="" type="checkbox"/>
A.4.3.9. Is information available on the demand and requirements for training and maintenance?	1, 28, 25	Pls. refer to A.4.3.8. of the protocol.	See CR 3	<input checked="" type="checkbox"/>
A.4.3.10. Is a schedule available for the implementation of the project and are there any risks for delays?	1, 28	Since the construction and installation have been completed and since the collection sites are all established and in operation, the project owner is confident on electricity generation in February as scheduled. The risk of delays deems extremely low.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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<b>A.4.4. Estimated amount of emission reductions over the chosen crediting period</b>				
A.4.4.1. Is the form required for the indication of projected emission reductions correctly applied?	1, 28	The required form is correctly applied in the PDD. <u>Corrective Action Request 1:</u> Regarding the fact that the on-site audit was carried out at the end of January, the registration day would be later than April 1 <sup>st</sup> , 2007 which is stated in the PDD. Pls. revise the starting date of crediting period in a reasonable manner.	CAR 1	<input checked="" type="checkbox"/>
A.4.4.2. Are the figures provided consistent with other data presented in the PDD?	1, 28	Yes, it is. (they do)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>A.4.5. Public funding of the project activity</b>				
A.4.5.1. Is the information provided on public funding provided in compliance with the actual situation or planning as available by the project participants?	1, 28,	There's no public funding from Annex I parties. Project owner's equity capital and commercial loan from China Minsheng Banking Group compose the investment of this project. The released letter from the bank and the related wire-transfer evidence have been reviewed during the audit.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.5.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex 2)?	38	The statements are in consistency within the PDD and Annex 2.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>B. Application of a baseline and monitoring methodology</b>				
<b>B.1. Title and reference of the approved baseline and monitoring methodology</b>				
B.1.1. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	1, 28	The methodology ACM0006, version 04 and the methodology ACM0002, version 06 are applied to this project. It is clearly indicated in B.1. of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.1.2. Is the applied version the most recent one and / or is this version still applicable?	1, 28	The applied versions are the most recent ones.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.2. Justification of the choice of the methodology and why it is applicable to the project activity														
B.2.1. Is the applied methodology considered the most appropriate one?	1, 28, 2	<p>The project activity fulfills the criteria of ACM0006:</p> <ul style="list-style-type: none"><li>- electricity generation through firing biomass residue;</li><li>- the biomass residue is the predominate fuel used in the plant; the fossil fuel is only used for transportation, mechanical treatment and starting fire;</li><li>- the produced electricity supplied the grid;</li><li>- the biomass residue will not be stored for more than one year;</li></ul> <p>Furthermore, it has been verified on site that the baseline scenario of the proposed project activity is scenario 2. Thus, the methodology is deemed to be the most applicable for this project among the existing approved methodologies.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
B.2.2. Is the project activity clear according to the PDD?	1, 28, 2	<table border="1"><thead><tr><th>Applicability checklist</th><th>Yes / No</th></tr></thead><tbody><tr><td>Greenfield project?</td><td>Yes</td></tr><tr><td>Power capacity expansion project?</td><td>No</td></tr><tr><td>Energy efficiency improvement project?</td><td>No</td></tr><tr><td>Fuel switch project?</td><td>No</td></tr></tbody></table> <p>The project activity is a new installation of a biomass residues fired power generation plant at a site where currently no power generation occurs, therefore, it's a Greenfield project.</p>	Applicability checklist	Yes / No	Greenfield project?	Yes	Power capacity expansion project?	No	Energy efficiency improvement project?	No	Fuel switch project?	No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No													
Greenfield project?	Yes													
Power capacity expansion project?	No													
Energy efficiency improvement project?	No													
Fuel switch project?	No													
B.2.3. Applicability Criterion 1: No other biomass types than biomass residues are used and these residues are the predominant fuel.	1, 28, 2	<table border="1"><thead><tr><th>Applicability checklist</th><th>Yes / No</th></tr></thead><tbody><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Evidences provided in the PDD?</td><td>Yes</td></tr></tbody></table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Evidences provided in the PDD?	Yes	See CR 1	<input checked="" type="checkbox"/>		
Applicability checklist	Yes / No													
Criterion discussed in the PDD?	Yes													
Compliance provable?	Yes													
Evidences provided in the PDD?	Yes													

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			<table><tr><td>Compliance verified?</td><td>No</td></tr></table> <p>Pls. see CR 1, the biomass residues utilized is not consistent through the PDD.</p>		Compliance verified?	No										
Compliance verified?	No															
B.2.4.	Criterion 2: For projects that use biomass residues from a production process (e.g. production of sugar or wood panel boards), the implementation of the project shall not result in an increase of the processing capacity of raw input (e.g. sugar, rice, logs, etc.) or in other substantial changes (e.g. product change) in this process	1, 28, 2	<table><tr><td>Applicability checklist</td><td>Yes / No</td></tr><tr><td>Criterion discussed in the PDD?</td><td>N.A.</td></tr><tr><td>Compliance provable?</td><td>N.A.</td></tr><tr><td>Evidences provided in the PDD?</td><td>N.A.</td></tr><tr><td>Compliance verified?</td><td>N.A.</td></tr></table> <p>Referring to CR 1, the biomass residues are not clearly defined in the PDD. Whereas, neither cotton straw nor corn straw is produced in a production process, hence, this criterion is not applicable.</p>		Applicability checklist	Yes / No	Criterion discussed in the PDD?	N.A.	Compliance provable?	N.A.	Evidences provided in the PDD?	N.A.	Compliance verified?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No															
Criterion discussed in the PDD?	N.A.															
Compliance provable?	N.A.															
Evidences provided in the PDD?	N.A.															
Compliance verified?	N.A.															
B.2.5.	Criterion 3: The biomass residues used by the project facility should not be stored for more than one year;	1, 28, 2	<table><tr><td>Applicability checklist</td><td>Yes / No</td></tr><tr><td>Criterion discussed in the PDD?</td><td>Yes</td></tr><tr><td>Compliance provable?</td><td>Yes</td></tr><tr><td>Evidences provided in the PDD?</td><td>No</td></tr><tr><td>Compliance verified?</td><td>Yes</td></tr></table> <p><u>Clarification Request 4:</u> Since the project is a newly installed power plant, all the biomass residues for the project activity were collected at the 4<sup>th</sup> quarter of last year. In other words, the biomass stored currently has not exceeded the limitation of 1 year. However, the PDD does not provide the information which approach will be applied to ensure this criterion could be fulfilled in the entire crediting period.</p>		Applicability checklist	Yes / No	Criterion discussed in the PDD?	Yes	Compliance provable?	Yes	Evidences provided in the PDD?	No	Compliance verified?	Yes	CR 4	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No															
Criterion discussed in the PDD?	Yes															
Compliance provable?	Yes															
Evidences provided in the PDD?	No															
Compliance verified?	Yes															
B.2.6.	Criterion 4: No significant energy quantities, <i>except</i>	1, 28, 2	<table><tr><td>Applicability checklist</td><td>Yes / No</td></tr></table>		Applicability checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>								
Applicability checklist	Yes / No															

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<i>from transportation or mechanical treatment of the biomass residues, are required to prepare the biomass residues for fuel combustion</i>			Criterion discussed in the PDD?	Yes		
			Compliance provable?	Yes		
			Evidences provided in the PDD?	Yes		
			Compliance verified?	Yes		
B.2.7.	Criterion 5: no storage for more than one year	1, 28, 2	Applicability checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
			Criterion discussed in the PDD?	Yes		
			Compliance provable?	Yes		
			Evidences provided in the PDD?	Yes		
			Compliance verified?	Yes		
B.2.8.	Criterion 6: No processing of the biomass residues prior to combustion, except from transportation or mechanical treatment, are required.	1, 28, 2	Applicability checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
			Criterion discussed in the PDD?	Yes		
			Compliance provable?	Yes		
			Evidences provided in the PDD?	Yes		
			Compliance verified?	Yes		
<b>B.3. Description of the sources and gases included in the project boundary</b>						
B.3.1.	Source: Grid electricity generation Gas(es): CO2 Type: Baseline Emissions	1, 28, 2	Boundary checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
			Source and gas(es) discussed in the PDD?	Yes		
			Inclusion / exclusion justified?	Yes		
			Explanation / Justification sufficient?	Yes		
			Consistency with monitoring plan?	Yes		

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		The generated electricity will be fed to the North China Power Grid which is mainly supplied by thermal power plants.												
B.3.2. Source: Heat generation Gas(es): CO2 Type: Baseline Emissions	1, 28, 2	<table border="1"> <tr> <th>Boundary checklist</th> <th>Yes / No</th> </tr> <tr> <td>Source and gas(es) discussed in the PDD?</td> <td>N.A.</td> </tr> <tr> <td>Inclusion / exclusion justified?</td> <td>N.A.</td> </tr> <tr> <td>Explanation / Justification sufficient?</td> <td>N.A.</td> </tr> <tr> <td>Consistency with monitoring plan?</td> <td>N.A.</td> </tr> </table> <p>The heat generation is not considered at this project, so this source is not applicable.</p>	Boundary checklist	Yes / No	Source and gas(es) discussed in the PDD?	N.A.	Inclusion / exclusion justified?	N.A.	Explanation / Justification sufficient?	N.A.	Consistency with monitoring plan?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed in the PDD?	N.A.													
Inclusion / exclusion justified?	N.A.													
Explanation / Justification sufficient?	N.A.													
Consistency with monitoring plan?	N.A.													
B.3.3. Source: Uncontrolled burning or decay of surplus biomass residues Gas(es): CH4 Type: Baseline Emissions	1, 28, 2	<table border="1"> <tr> <th>Boundary checklist</th> <th>Yes / No</th> </tr> <tr> <td>Source and gas(es) discussed in the PDD?</td> <td>Yes</td> </tr> <tr> <td>Inclusion / exclusion justified?</td> <td>Yes</td> </tr> <tr> <td>Explanation / Justification sufficient?</td> <td>Yes</td> </tr> <tr> <td>Consistency with monitoring plan?</td> <td>Yes</td> </tr> </table> <p>Scenario 2 is verified to be the most likely baseline scenario, hence according to the methodology, the CH<sub>4</sub> emission source is considered under the situation of B1 or B3.</p>	Boundary checklist	Yes / No	Source and gas(es) discussed in the PDD?	Yes	Inclusion / exclusion justified?	Yes	Explanation / Justification sufficient?	Yes	Consistency with monitoring plan?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed in the PDD?	Yes													
Inclusion / exclusion justified?	Yes													
Explanation / Justification sufficient?	Yes													
Consistency with monitoring plan?	Yes													
B.3.4. Source: On-site fossil fuel or electricity consumption Gas(es): CO2 Type: Project Emissions	1, 28, 2	<table border="1"> <tr> <th>Boundary checklist</th> <th>Yes / No</th> </tr> <tr> <td>Source and gas(es) discussed in the PDD?</td> <td>Yes</td> </tr> <tr> <td>Inclusion / exclusion justified?</td> <td>Yes</td> </tr> <tr> <td>Explanation / Justification sufficient?</td> <td>No</td> </tr> <tr> <td>Consistency with monitoring plan?</td> <td>No</td> </tr> </table> <p><u>Corrective Action Request 2:</u>            Referring to the calculation of project emission in Chapter B.6.3. of the PDD, the emission caused by the consumption of electricity is zero. However, during the plant visiting, the electricity supplied</p>	Boundary checklist	Yes / No	Source and gas(es) discussed in the PDD?	Yes	Inclusion / exclusion justified?	Yes	Explanation / Justification sufficient?	No	Consistency with monitoring plan?	No	CAR 2	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed in the PDD?	Yes													
Inclusion / exclusion justified?	Yes													
Explanation / Justification sufficient?	No													
Consistency with monitoring plan?	No													



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			from grid does be used for operation. Pls. correct accordingly.													
B.3.5.	Source: Off-site transportation of biomass residues Gas(es): CO2 Type: Project Emissions	1, 28, 2	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed in the PDD?</td><td>Yes</td></tr><tr><td>Inclusion / exclusion justified?</td><td>Yes</td></tr><tr><td>Explanation / Justification sufficient?</td><td>Yes</td></tr><tr><td>Consistency with monitoring plan?</td><td>Yes</td></tr></table>		Boundary checklist	Yes / No	Source and gas(es) discussed in the PDD?	Yes	Inclusion / exclusion justified?	Yes	Explanation / Justification sufficient?	Yes	Consistency with monitoring plan?	Yes	☑	☑
			Boundary checklist	Yes / No												
			Source and gas(es) discussed in the PDD?	Yes												
			Inclusion / exclusion justified?	Yes												
			Explanation / Justification sufficient?	Yes												
			Consistency with monitoring plan?	Yes												
B.3.6.	Source: Combustion of biomass residues Gas(es): CH4 Type: Project Emissions	1, 28, 2	<table><tr><td>Boundary checklist</td><td>Yes / No</td></tr><tr><td>Source and gas(es) discussed in the PDD?</td><td>Yes</td></tr><tr><td>Inclusion / exclusion justified?</td><td>Yes</td></tr><tr><td>Explanation / Justification sufficient?</td><td>Yes</td></tr><tr><td>Consistency with monitoring plan?</td><td>Yes</td></tr></table> <u>Corrective Action Request 3:</u> According to the methodology, the CO <sub>2</sub> emission from the combustion of biomass residues gas needs not be considered, pls. correct the statement in Table B.3.		Boundary checklist	Yes / No	Source and gas(es) discussed in the PDD?	Yes	Inclusion / exclusion justified?	Yes	Explanation / Justification sufficient?	Yes	Consistency with monitoring plan?	Yes	CAR 3	☑
			Boundary checklist	Yes / No												
			Source and gas(es) discussed in the PDD?	Yes												
			Inclusion / exclusion justified?	Yes												
			Explanation / Justification sufficient?	Yes												
			Consistency with monitoring plan?	Yes												
B.3.7.	Is the spatial extension of project boundary clear described?	1, 28, 2	The project boundary includes: <ul style="list-style-type: none"><li>- the power plant at the project site;</li><li>- the means for transportation of biomass to the project site, in this case, transportation is undertaken by vehicles;</li><li>- all power plants connected physically to the North China Power Grid;</li></ul> <u>Corrective Action Request 4:</u> If the biomass residues are dumped for leaving to decay without implementing in the project, the site where the biomass residues would have been left for decay or dumped shall also be included in the project spatial extent. Pls. add it into the revised PDD.		CAR 4	☑										

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B.3.8. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included to the PDD?	1, 28, 2, 5	<p><u>Clarification Request 5:</u></p> <p>The figures of available cotton straw for the project activity are not consistent in the PDD. In Chapter B.3., as quoted, in Wei county the annual straws resources are 0.6 million tons, 90% of them are dumped or left to decay or burned in an uncontrolled manner. However, in Step 1 of B.5., it is stated that 75% of them are dumped or burned. But in Step 4, the amount of available straw in Wei County is only 0.38 million tons per year. Furthermore, there's no clearly identified boundary of region where the biomass residues are available for the project activity. The same numbers of EACH available biomass residues within the defined area shall be demonstrated respectively and used throughout the revised PDD.</p>	CR 5	<input checked="" type="checkbox"/>										
B.4. Description of how the baseline scenario is identified and description of the identified baseline scenario														
B.4.1. Have all technically feasible baseline scenario alternatives to the project activity been identified and discussed by the PDD? Why can this list be considered as being complete?	1, 28, 2	<table><tr><td colspan="2">Realistic and credible alternatives should be determined:</td></tr><tr><td>Completely discussed and reasoned in the PDD?</td><td>Yes / No</td></tr><tr><td>how <b>power</b> would be generated in the absence of the CDM project activity;</td><td>Yes</td></tr><tr><td>what would happen to the <b>biomass residues</b> in the absence of the project activity; and</td><td>Yes</td></tr><tr><td>in case of cogeneration projects: how the <b>heat</b> would be generated in the absence of the project activity</td><td>N.A.</td></tr></table> <p>The heat generated by the proposed project activity does not be considered.</p>	Realistic and credible alternatives should be determined:		Completely discussed and reasoned in the PDD?	Yes / No	how <b>power</b> would be generated in the absence of the CDM project activity;	Yes	what would happen to the <b>biomass residues</b> in the absence of the project activity; and	Yes	in case of cogeneration projects: how the <b>heat</b> would be generated in the absence of the project activity	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Realistic and credible alternatives should be determined:														
Completely discussed and reasoned in the PDD?	Yes / No													
how <b>power</b> would be generated in the absence of the CDM project activity;	Yes													
what would happen to the <b>biomass residues</b> in the absence of the project activity; and	Yes													
in case of cogeneration projects: how the <b>heat</b> would be generated in the absence of the project activity	N.A.													
B.4.2. Is the project activity categorized and is that retraceable?	1, 28, 2	For <b>power</b> generation, the realistic and credible alternatives may include:	CAR 5	<input checked="" type="checkbox"/>										

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		Categories		Yes / No	
		P1	The proposed project activity not undertaken as a CDM project activity	No	
		P2	The proposed project activity (installation of a power plant), fired with the same type of biomass residues but with a lower efficiency of electrical generation (e.g. an efficiency that is common practice in the relevant industry sector)	No	
		P3	The generation of power in an existing plant, on-site or nearby the project site, using only fossil fuels	No	
		P4	The generation of power in existing and/or new grid-connected power plants	Yes	
		P5	The continuation of power generation in an existing power plant, fired with the same type of biomass residues as (co-) fired in the project activity, and implementation of the project activity, not undertaken as a CDM project activity, at the end of the lifetime of the existing plant	No	
		P6	The continuation of power generation in an existing power plant, fired with the same type of biomass residues as (co-) fired in the project activity and, at the end of the lifetime of the existing plant, replacement of that plant by a similar new plant	No	
		For <b>heat</b> generation, realistic and credible alternative(s) may include:			
Categories		Yes / No			

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		H1	The proposed project activity not undertaken as a CDM project activity	N.A.				
		H2	The proposed project activity (installation of a cogeneration power plant), fired with the same type of biomass residues but with a different efficiency of heat generation (e.g. an efficiency that is common practice in the relevant industry sector)	N.A.				
		H3	The generation of heat in an existing cogeneration plant, on-site or nearby the project site, using only fossil fuels	N.A.				
		H4	The generation of heat in boilers using the same type of biomass residues	N.A.				
		H5	The continuation of heat generation in an existing cogeneration plant, fired with the same type of biomass residues as in the project activity, and implementation of the project activity, not undertaken as a CDM project activity, at the end of the lifetime of the existing plant	N.A.				
		H6	The generation of heat in boilers using fossil fuels	N.A.				
		H7	The use of heat from external sources, such as district heat	N.A.				
		H8	Other heat generation technologies (e.g. heat pumps or solar energy)	N.A.				
		For the use of <b>biomass residues</b> , the realistic and credible alternative(s) may include, <i>inter alia</i> :						
		Categories					Yes / No	

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		B1	The biomass residues are dumped or left to decay under mainly aerobic conditions. This applies, for example, to dumping and decay of biomass residues on fields.	Yes		
		B2	The biomass residues are dumped or left to decay under clearly anaerobic conditions. This applies, for example, to deep landfills with more than 5 meters. This does not apply to biomass residues that are stock-piled <sup>1</sup> or left to decay on fields.	No		
		B3	The biomass residues are burnt in an uncontrolled manner without utilizing it for energy purposes.	Yes		
		B4	The biomass residues are used for heat and/or electricity generation at the project site	No		
		B5	The biomass residues are used for power generation, including cogeneration, in other existing or new grid-connected power plants <sup>2</sup>	No		
		B6	The biomass residues are used for heat generation in other existing or new boilers at other sites <sup>3</sup>	No		
		B7	The biomass residues are used for other energy purposes, such as the generation of bio-fuels	No		
		B8	The biomass residues are used for non-energy purposes, e.g. as fertilizer or as feed-stock in processes (e.g. in the pulp and paper industry)	No		
		During the site visiting and document review, it has been verified that most cotton straws are dumped or left to decay under mainly aerobic conditions or burnt in an uncontrolled manner without im-				

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			plementation of the proposed project. Whereas, one fault are detected in the baseline scenario discussion.  <u>Corrective Action Request 5:</u> There's no reason given in Chapter B.4. of the PDD to rule Scenario B8 out. Pls. add the related information into the revised version.										
B.4.3.	What kind of scenario combination has been applied according to table 1 of methodology?	1, 28, 2	In consideration of the reality that there's neither fossil fuel power plant nor biomass fired power plant on site or nearby the project site accordingly no other use of cotton straws than being dumped or left to decay or burnt in an uncontrolled manner takes place. So Scenario 2 of table 1 seems to be the only one that makes sense.	☑	☑								
B.4.4.	Does the chosen scenario meet engineered project activity?	1, 28, 2, 5	Yes.	☑	☑								
B.4.5.	Have applicable regulatory or legal requirements been identified?	1, 28, 35, 36	Utilizing the biomass residues for power generation is encouraged by the China government. The Renewable Energy Promotion Law and Renewable Energy, which became effective on Jan. 1 <sup>st</sup> , 2006, regulate clearly that the electricity in-fed tariff shall be 0.25 RMB/kWh higher than the average price of power supplied by coal-fired power plants in the same region.	☑	☑								
B.4.6.	Does the project identify correctly and excludes those options not in line with regulatory or legal requirements?	1, 28, 35, 36	All the identified options are in line with regulations and legal requirements.	☑	☑								
B.4.7.	In case of the scenarios 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16 and 17, a power plant was already operated in respective. In case of the scenarios 1, 2, 3, 4, 7, 8, 10, 11, 12, 13, 14, 15, 16 and 17 heat may		<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Age of each component mentioned?</td><td>N.A.</td></tr><tr><td>Expected lifetime of each component mentioned?</td><td>N.A.</td></tr><tr><td>Does the ending date fall in the scheduled credit-</td><td>N.A.</td></tr></table>	Data Checklist	Yes / No	Age of each component mentioned?	N.A.	Expected lifetime of each component mentioned?	N.A.	Does the ending date fall in the scheduled credit-	N.A.	☑	☑
Data Checklist	Yes / No												
Age of each component mentioned?	N.A.												
Expected lifetime of each component mentioned?	N.A.												
Does the ending date fall in the scheduled credit-	N.A.												

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already have been generated at the project site prior to the implementation of the project activity. Hence, the lifetime and age of the baseline components need to be considered.			ing period of the project?			
			Evidences clearly referenced?		N.A.	
			Has this value been verified?		N.A.	
			Choice of data correctly justified?		N.A.	
			Measurement method correctly described?		N.A.	
			There's no existing electricity or heat generation plant on site or nearby the project site. Hence, this section is inapplicable.			
B.5. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered CDM project activity (assessment and demonstration of additionality):						
B.5.1.	In case of applying step 2 / investment analysis of the additionality tool: Is the analysis method identified appropriately (step 2a)?	1, 28, 2, 3	3 analysis methods are provided according to the additionality tool (version 2). Because the proposed project generates economic benefits through the sales of electricity other than CDM revenue, therefore, the Option I (simple cost analysis) can't be taken. To determine whether install the proposed project, the benchmark IRR of power industry is the key parameter, hence, it deems that Option III (benchmark analysis) is the only applicable one.  <u>Corrective Action Request 6:</u>  Because the heat generation is not taken into account, there's no revenue from heat sales, pls. revise the description of Option I at Sub-step 2a of the PDD.		CAR 6	☑
B.5.2.	In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than CDM income?		As described above, Option III is chosen for the investment analysis. This section is not applicable.		☑	☑
B.5.3.	In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV,		As described above, Option III is chosen for the investment analysis. This section is not applicable.		☑	☑

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cost benefit ratio, or (levelized) unit cost)?					
B.5.4.	In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	1, 28, 8, 12, 14, 15, 16, 18, 19, 24, 29, 34, 37, 38,	<p>The IRR with / without CDM revenue are clearly demonstrated in 2 tables at Sub-step 2c of the PDD. The spreadsheet in Chinese has been reviewed by the audit team. All the relative data for calculation are from the approved feasibility report, besides the annual consumption of cotton straws (pls. refer to CR 1). Moreover, pls. also make the revision for the following issues.</p> <p><u>Corrective Action Request 7:</u></p> <ul style="list-style-type: none"> <li>- Required by the latest EB meeting, the data and calculation process on figuring out the IRR shall be added into the PDD or attached to the PDD as an annex;</li> <li>- The unit of total investment in table "Key parameters for the calculation of financial indicators" shall be 'ten thousand Yuan', pls. correct.</li> </ul>	CAR 7 See CR 1	<input checked="" type="checkbox"/>
B.5.5.	In case of Option II or Option III: Is the calculation of financial figures for this indicator correctly done for all alternatives and the project activity?	24	Yes. The IRR has been figured out under the alternative, implementation of proposed project without CDM revenue, and the project activity itself. The different result is presented in table "Financial indicators of the proposed project" in the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.6.	In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the utilized data?	24 see B.5.4	Most of the data used for financial analysis are from the approved report of the feasibility study. Whereas, referring to CR 1, additional evidence of the yearly biomass consumed by project activity needs to be provided.	See CR 1	<input checked="" type="checkbox"/>
B.5.7.	In case of applying step 3 (barrier analysis) of the additionality tool: Is a complete list of barriers developed that prevent the different alternatives to occur?	1, 28	Doubtless, while implementing the project activity, the project owner has to encounter both financing and technology barriers. Since utilizing biomass for electricity generation a new technology is introduced to China. The investment on the technology transfer and on importing key equipments are much higher than the installation of a thermal plant. Compared with installing a coal-fire power plant, the high risk of operation and the trend of increasing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



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			biomass price weaken the loan repayment capability. Also more operation and maintenance problems are foreseen. These difficulties have been assessed by the audit team with evidences provided by bank and manufacture.		
B.5.8.	In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and significance of these barriers?		Yes. Pls. see B.5.7. of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.9.	In case of applying step 3 (barrier analysis): Is it transparently shown that the execution of at least one of the alternatives is not prevented by the identified barriers?	1, 28,	Neither investment nor technology barriers could prevent the execution of defined baseline scenario.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.10.	Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD (step 4a)?	1, 28,	There's no similar project activity in operation or even in construction in Hebei Province.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.11.	If similar activities are occurring: Is it demonstrated that in spite of these similarities the project activity would not be implemented without the CDM component (step 4b)?	1, 28,	Pls. see B.5.10. of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.5.12.	Is it appropriately explained how the approval of the project activity will help to overcome the economic and financial hurdles or other identified barriers (step 5)?	1, 28,	The CDM registration will help to overcome the financial risks and technical barriers.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>B.6. Emissions reductions</b>					
<b>B.6.1. Explanation of methodological choices</b>					
B.6.1.1.	Is it explained how the procedures pro-	1,	The calculation process of the emission reduction complies with	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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vided in the methodology are applied by the proposed project activity?	28, 2	the procedures provided in the methodology. There is a difference between the emission reductions through substitution of electricity generation with fossil fuels, project emissions and emissions due to leakage. In this case, because of the applied baseline scenario 2, baseline emissions due to the natural decay or burning of anthropogenic sources of biomass residues are also considered.		
B.6.1.2. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	1, 28, 2, 5	<p>Yes, the justification has been fully discussed and demonstrated in the PDD based on the options provided from the latest methodology. Allowing for that the baseline scenario is the substitution of electricity from grid which is mainly supplied by thermal plants. So the methodology ACM0002 is applied to calculate the emission factor of grid. Furthermore, as stated in the PDD, ex-ante approach is adopted. Besides issues mentioned below, most of the data are referring to the latest available Chinese Electric Power Yearbook (2003-2005), the China Energy Statistical Yearbook (2000-2005).</p> <p><u>Corrective Action Request 8:</u></p> <ul style="list-style-type: none"> <li>- According to the methodology, the <i>dry</i> weight of biomass residues shall be used for all the calculations. Hence, pls. consider the moisture content while estimating the emission reduction and demonstrate the calculation process into the revised PDD;</li> <li>- Pls. update all the IPCC default values with the latest 2006 version;</li> <li>- The emission of on site transportation of the biomass residues shall also be included in the calculation of Carbon dioxide emissions from on site consumption of fossil fuels. Pls. correct Sub-step 3c of the PDD accordingly. In addition, pls. also deliver the estimation process of diesel consumption to audit team;</li> </ul>	CAR 8 CR 6	<input checked="" type="checkbox"/>

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		<ul style="list-style-type: none"> <li>Even the OM and BM released by NDRC are adopted, for the purpose of assessment executed by DOE, EB and other global stakeholders, pls. add the complete calculation process into Annex 3 and demonstrate the entire procedures in Step 1 of B.6. of the PDD. Furthermore, pls. submit the spreadsheet to the audit team for review.</li> </ul> <p><u>Clarification Request 6:</u> The reliable source of <math>NCV_c = 0.01752</math> TJ/t shall be delivered to the auditor for Calculating the verification.</p>		
B.6.1.3. Which conservativeness factor has been chosen and how is this choice justified?	1, 28, 2, 5	Two parameters used for $PET_y$ calculation are chosen in a conservation manner. Instead of the average round trip distance and the average truck load, the longest round trip distance and smallest load used as $AVD_y$ and $TL_y$ respectively, which results in higher project emissions and lower emissions reduction.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.1.4. Are the formulae required for the determination of project emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1, 28, 2, 5	Most of formulae used for project emissions are complied with the methodology. However, referred to CAR 8, the formula (10) in the PDD needs to be corrected.	See CAR 8	<input checked="" type="checkbox"/>
B.6.1.5. Are the formulae required for the determination of baseline emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1, 28, 2, 5	Pls. kindly see CAR 8. The formulae used grid EF calculation are not complete, pls. add the additional ones of BM calculation into the revised version.	See CAR 8	<input checked="" type="checkbox"/>
B.6.1.6. Are the formulae required for the determination of leakage emissions correctly presented, enabling a complete identification of parameter to be used and / or monitored?	1, 28, 2, 5	Option L2 is used to demonstrate that the usage of the biomass residues does not result in increased fossil fuel consumption. Although the amounts of available biomass residues are inconsistent in the PDD, the smallest figure is used for L2 discussion and the abundant surplus of the cotton straws is 180% larger than that consumed at the project site. Considering the additional informa-	CAR 9	<input checked="" type="checkbox"/>

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		<p>tion obtained from the site visiting, the audit team is confident that the quantity of available cotton straws in Wei County is at least 25% larger than used. Hence, the leakage at validation stage deems to be zero.</p> <p><u>Corrective Action Request 9:</u></p> <p>Whereas, according to the methodology, the leakage shall be monitored during the crediting period in a defined geographical boundary of the region. In case, the leakage effects cannot be ruled out under the situation of L2. The emission of leakage shall be included in the emissions reduction calculation. The related formula and the parameters shall be demonstrated in the revised PDD.</p>		
B.6.1.7. Are the formulae required for the determination of emission reductions correctly presented?	1, 28, 2	Yes, it is correctly presented.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<p><b>B.6.2. Data and parameters that are available at validation</b></p> <p><i>The Emission reduction is estimated by the formula <math>ER_y = ER_{heat, y} + ER_{electricity, y} + BE_{biomass, y} - PE_y - L_y</math></i></p> <p><i><math>ER_y</math> = Emissions reductions of the project activity during the year y (tCO<sub>2</sub>/yr)</i></p> <p><i><math>ER_{electricity, y}</math> = Emission reductions due to displacement of electricity during the year y (tCO<sub>2</sub>/yr)</i></p> <p><i><math>ER_{heat, y}</math> = Emission reductions due to displacement of heat during the year y (tCO<sub>2</sub>/yr)</i></p> <p><i><math>BE_{biomass, y}</math> = Baseline emissions due to natural decay or burning of anthropogenic sources of biomass residues during the year y (tCO<sub>2e</sub>/yr)</i></p> <p><i><math>PE_y</math> = Project emissions during the year y (tCO<sub>2</sub>/yr)</i></p> <p><i><math>L_y</math> = Leakage emissions during the year y (tCO<sub>2</sub>/yr)</i></p> <p><i>Depending on the project not all variables are relevant. Only relevant variables shall be considered following.</i></p> <p><i>Parameters that are not relevant shall be addressed as not relevant.</i></p>				
B.6.2.1. Is the list of parameters presented in chapter B.6.2 considered to be complete with regard to the requirements of the ap-	1, 28, 2	Most of the parameters which determine the baseline and project emissions are indicated in. table B.6.2. However, some indicators are missing.	CAR 10	<input checked="" type="checkbox"/>

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plied methodology?		<u>Corrective Action Request 10:</u> Pls. add parameters, $NCV_c$ , $FF_{\text{project plant, I, y}}$ , $FF_{\text{project site, I, y}}$ , and $EC_{PJ,y}$ into the list.																				
B.6.2.2. Does the quantity of biomass residues refer to the dry weight?	1, 28, 2, 5	Pls. kindly refer to CAR 8.	See CAR 8	☑																		
B.6.2.3. Parameter Title: Global warming potential for CH4 (GWP CH4)	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Choice of data correctly justified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided?	Yes	Has this value been verified?	Yes	Choice of data correctly justified?	Yes	Measurement method correctly described?	Yes	☑	☑
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	Yes																					
Correct value provided?	Yes																					
Has this value been verified?	Yes																					
Choice of data correctly justified?	Yes																					
Measurement method correctly described?	Yes																					
B.6.2.4. Parameter Title: Net quantity of electricity generated during the three most recent years in the fossil fuel fired captive power plant identified as baseline plant (P3) $EG_{CP,historic,3y}$	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table> <p>P3 isn't the baseline scenario of the proposed project, so, this</p>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.	☑	☑
Data Checklist	Yes / No																					
Title in line with methodology?	N.A.																					
Data unit correctly expressed?	N.A.																					
Appropriate description of parameter?	N.A.																					
Source clearly referenced?	N.A.																					
Correct value provided?	N.A.																					
Has this value been verified?	N.A.																					
Choice of data correctly justified?	N.A.																					
Measurement method correctly described?	N.A.																					

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		section is not applied.																				
B.6.2.5. Parameter Title: Net quantity of electricity generated during the most recent three years in all power plants at the project site, generated from firing the same type(s) of biomass residues as in the project plant EG <sub>historic,3y</sub>	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table> <p>There's no existing power plant utilizing any kind of biomass residues. So, this section is not applied.</p>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	N.A.																					
Data unit correctly expressed?	N.A.																					
Appropriate description of parameter?	N.A.																					
Source clearly referenced?	N.A.																					
Correct value provided?	N.A.																					
Has this value been verified?	N.A.																					
Choice of data correctly justified?	N.A.																					
Measurement method correctly described?	N.A.																					
B.6.2.6. Parameter Title: Quantity of fossil fuel type i combusted during the most recent three years in the captive power plant FF <sub>CP, historic,3y</sub>	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table> <p>The project activity is a new installed power plant, hence, this section needs not be considered.</p>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	N.A.																					
Data unit correctly expressed?	N.A.																					
Appropriate description of parameter?	N.A.																					
Source clearly referenced?	N.A.																					
Correct value provided?	N.A.																					
Has this value been verified?	N.A.																					
Choice of data correctly justified?	N.A.																					
Measurement method correctly described?	N.A.																					
B.6.2.7. Parameter Title: Average net efficiency of heat generation in the project plant prior to project implementation	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>												
Data Checklist	Yes / No																					
Title in line with methodology?	N.A.																					
Data unit correctly expressed?	N.A.																					

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$\epsilon_{th\_pre\ project}$		<table><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table>	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.									
Appropriate description of parameter?	N.A.																						
Source clearly referenced?	N.A.																						
Correct value provided?	N.A.																						
Has this value been verified?	N.A.																						
Choice of data correctly justified?	N.A.																						
Measurement method correctly described?	N.A.																						
B.6.2.8. Parameter Title: Average net efficiency of electricity generation in the project plant prior to project implementation $\epsilon_{el\_pre\ project}$	1, 28, 2	<table><tr><td>Data Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																						
Title in line with methodology?	N.A.																						
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Choice of data correctly justified?	N.A.																						
Measurement method correctly described?	N.A.																						
B.6.2.9. Parameter Title: Average net efficiency of electricity generation in biomass residue fired power plants in the grid that fire the same type of biomass residues as the project plant. $\epsilon_{el\_grid\ plants}$	1, 28, 2	<table><tr><td>Data Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Data Checklist	Yes / No																						
Title in line with methodology?	N.A.																						
Data unit correctly expressed?	N.A.																						
Appropriate description of parameter?	N.A.																						
Source clearly referenced?	N.A.																						
Correct value provided?	N.A.																						
Has this value been verified?	N.A.																						
Choice of data correctly justified?	N.A.																						

## Validation Protocol

Project Title: Straw generating project in Wei County Hebei Province, P.R. China

Date of Completion: Jan. 16<sup>th</sup>, 2008

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PDD in GSP	Final PDD																		
		<table><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table> <p>There's no existing biomass residue fired power plant, so this section is inapplicable.</p>		Measurement method correctly described?	N.A.																		
Measurement method correctly described?	N.A.																						
B.6.2.10. Parameter Title: Average net energy efficiency of power / heat generation in the reference power / cogeneration plant that would use the biomass residues fired in the project plant in the absence of the project activity $\epsilon_{el, reference\ plant}$ $\epsilon_{th\_reference\ plant}$	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table> <p>The project activity is a new installed power plant, hence, this section needs not be considered.</p>		Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																						
Title in line with methodology?	N.A.																						
Data unit correctly expressed?	N.A.																						
Appropriate description of parameter?	N.A.																						
Source clearly referenced?	N.A.																						
Correct value provided?	N.A.																						
Has this value been verified?	N.A.																						
Choice of data correctly justified?	N.A.																						
Measurement method correctly described?	N.A.																						
B.6.2.11. Parameter Title: Average net efficiency of electricity / heat generation in the existing power / cogeneration plant(s) fired with the same type of biomass residue at the project site $\epsilon_{el, existing\ plant}$ $\epsilon_{th\_existing\ plant}$	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table> <p>No power plant utilizing biomass residues locates at or nearby the project site, thus, this section needs not be considered.</p>		Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																						
Title in line with methodology?	N.A.																						
Data unit correctly expressed?	N.A.																						
Appropriate description of parameter?	N.A.																						
Source clearly referenced?	N.A.																						
Correct value provided?	N.A.																						
Has this value been verified?	N.A.																						
Choice of data correctly justified?	N.A.																						
Measurement method correctly described?	N.A.																						
B.6.2.12. Parameter Title:	1,			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																		



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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PDD in GSP	Final PDD																		
Net quantity of heat generated during the most recent three years in all cogeneration plants at the project site, generated from firing the same type(s) of biomass residues as in the project plant $Q_{\text{historic 3y}}$	28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table> <p>Heat generation is not considered in this case, hence, this section is not applicable.</p>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.			
Data Checklist	Yes / No																						
Title in line with methodology?	N.A.																						
Data unit correctly expressed?	N.A.																						
Appropriate description of parameter?	N.A.																						
Source clearly referenced?	N.A.																						
Correct value provided?	N.A.																						
Has this value been verified?	N.A.																						
Choice of data correctly justified?	N.A.																						
Measurement method correctly described?	N.A.																						
B.6.2.13. Parameter Title: Net quantity of heat generated during the most recent three years in all boilers at the project site, generated from firing the same type(s) of biomass residues as in the project plant $Q_{\text{biomass historic 3y}}$	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table> <p>Heat generation is not considered in this case, hence, this section is not applicable.</p>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Data Checklist	Yes / No																						
Title in line with methodology?	N.A.																						
Data unit correctly expressed?	N.A.																						
Appropriate description of parameter?	N.A.																						
Source clearly referenced?	N.A.																						
Correct value provided?	N.A.																						
Has this value been verified?	N.A.																						
Choice of data correctly justified?	N.A.																						
Measurement method correctly described?	N.A.																						
B.6.2.14. Parameter Title: Quantity of biomass residue type k that has been fired in boilers for heat generation during the most recent three years at the project site $BF_k$ , Boiler, historic 3y	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>									
Data Checklist	Yes / No																						
Title in line with methodology?	N.A.																						
Data unit correctly expressed?	N.A.																						
Appropriate description of parameter?	N.A.																						
Source clearly referenced?	N.A.																						

# Validation Protocol

Project Title: Straw generating project in Wei County Hebei Province, P.R. China

Date of Completion: Jan. 16<sup>th</sup>, 2008

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PDD in GSP	Final PDD																		
		<table><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table>	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.													
Correct value provided?	N.A.																						
Has this value been verified?	N.A.																						
Choice of data correctly justified?	N.A.																						
Measurement method correctly described?	N.A.																						
		This baseline scenario is not applied to the proposed project, therefore, this section needs not be considered.																					
B.6.2.15. Parameter Title: Energy efficiency of the biomass residue fired boiler that would be used in the absence of the project activity $\epsilon_{\text{boiler biomass}}$	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																						
Title in line with methodology?	N.A.																						
Data unit correctly expressed?	N.A.																						
Appropriate description of parameter?	N.A.																						
Source clearly referenced?	N.A.																						
Correct value provided?	N.A.																						
Has this value been verified?	N.A.																						
Choice of data correctly justified?	N.A.																						
Measurement method correctly described?	N.A.																						
		This baseline scenario is not applied to the proposed project, therefore, this section needs not be considered.																					
B.6.2.16. Parameter Title: Quantity of biomass residue type k used as fuel in all installations (power plants, boilers, etc) at the project site during the most recent three years prior to the implementation of the project activity $B F_{\text{historic, k, 3y}}$	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Choice of data correctly justified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr></table>	Data Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided?	N.A.	Has this value been verified?	N.A.	Choice of data correctly justified?	N.A.	Measurement method correctly described?	N.A.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																						
Title in line with methodology?	N.A.																						
Data unit correctly expressed?	N.A.																						
Appropriate description of parameter?	N.A.																						
Source clearly referenced?	N.A.																						
Correct value provided?	N.A.																						
Has this value been verified?	N.A.																						
Choice of data correctly justified?	N.A.																						
Measurement method correctly described?	N.A.																						
		This baseline scenario is not applied to the proposed project, therefore, this section needs not be considered.																					

## Validation Protocol

Project Title: Straw generating project in Wei County Hebei Province, P.R. China

Date of Completion: Jan. 16<sup>th</sup>, 2008

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD																		
		The project activity is a new installed power plant, hence, this section needs not be considered.																				
B.6.2.17. Parameter Title: Moisture content of each biomass residue type k or i	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Choice of data correctly justified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr></table> <p>Pls. see CAR 8 for information.</p>	Data Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	No	Measurement method correctly described?	No	See CAR 8	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	No																					
Data unit correctly expressed?	No																					
Appropriate description of parameter?	No																					
Source clearly referenced?	No																					
Correct value provided?	No																					
Has this value been verified?	No																					
Choice of data correctly justified?	No																					
Measurement method correctly described?	No																					
B.6.2.18. Parameter Title: Net calorific values of fossil fuel type i NCV <sub>i</sub>	1, 28, 2	<table><tr><th>Data Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Choice of data correctly justified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr></table> <p>Pls. kindly refer to CR 6.</p>	Data Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	No	Correct value provided?	No	Has this value been verified?	No	Choice of data correctly justified?	No	Measurement method correctly described?	No	See CR 6	<input checked="" type="checkbox"/>
Data Checklist	Yes / No																					
Title in line with methodology?	Yes																					
Data unit correctly expressed?	Yes																					
Appropriate description of parameter?	Yes																					
Source clearly referenced?	No																					
Correct value provided?	No																					
Has this value been verified?	No																					
Choice of data correctly justified?	No																					
Measurement method correctly described?	No																					
B.6.3. Ex-ante calculation of emission reductions																						
B.6.3.1. Is the projection based on the same procedures as used for future monitoring?	1, 28, 2	Pls. see CAR 2, CAR 8 and CAR 9, the emission of leakage and electricity & diesel consumption at the project site shall be considered for both projection estimation and future monitoring.	See CAR 2, 8, 9	<input checked="" type="checkbox"/>																		

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B.6.3.2. Are the GHG calculations documented in a complete and transparent manner?	1, 28, 2	Yes, the formulae and data are all demonstrated in Chapter B.6.3. of the PDD. However, referred to CAR 8, the calculation processes and results shall be updated.	See CAR 8 CAR 9	<input checked="" type="checkbox"/>
B.6.3.3. Is the data provided in this section consistent with data as presented in other chapters of the PDD?	1, 28, 2	Yes, the data of each parameter are consistent throughout the entire PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.3.4. Are calculation tools used? If so is the data used in the tools consistent with the stated in the PDD?	1, 28, 2	Besides the spreadsheet of emission factor of defined grid, the rest calculation procedures are demonstrated in the PDD. So far, no calculation tools are used.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>B.6.4. Summary of the ex-ante estimation of emission reductions</b>				
B.6.4.1. Will the project result in fewer GHG emissions than the baseline scenario?	1, 28, 2, 21, 22, 23	Though there are some faults in the baseline and project emissions calculations, being a biomass residue fired project, it's doubtless that the emissions due to the project activity are much lower than the baseline scenario.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4.2. Is the form/table required for the indication of projected emission reductions correctly applied?	1, 28, 2	Yes. The form includes the crediting period, the emissions of project activity, the baseline together with the leakage and the final annual emissions reduction.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.6.4.3. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	1, 28, 2	Pls. kindly refer to CAR 1, the starting date of crediting period should be revised.	See CAR 1	<input checked="" type="checkbox"/>
B.6.4.4. Is the data provided in this section in consistency with data as presented in other chapters of the PDD?	1, 28, 2	Yes, the data demonstrated in the table B.6.4 are consistent to that in other chapters of the PDD. However, pls. refer to the requirements of correction in this protocol. The calculations needs to be updated or modified.	See CAR 2 CAR 8	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD																								
B.7. Application of the monitoring methodology and description of the monitoring plan																												
B.7.1. Data and parameters monitored																												
B.7.1.1. Is the list of parameters presented in chapter B.7.1 considered to be complete with regard to the requirements of the applied methodology?	1, 28, 2	The list of required parameters necessary for the monitoring is not complete. Pls. kindly refer to the following issues B.7.1.2 – B.7.1.33 of the protocol for the revision. Furthermore, according to the requirement of the methodology, all data collected as part of monitoring should be archived electronically, pls. take it into account while setting out the relevant procedures.	See CAR 11-20 CR 7-9	<input checked="" type="checkbox"/>																								
B.7.1.2. Parameter Title: Quantity of biomass residue type k combusted in the project plant during the year y BF <sub>k,y</sub>	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table> <u>Clarification Request 7:</u> Besides the revision required from CAR 8, to monitor the BF <sub>k,y</sub> , the PDD shall also provide a clear description on the measuring equipment, the accuracy of this instrument and the related calibration process to monitor this parameter.	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	Yes	Has this value been verified?	No	Measurement method correctly described?	Yes	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	Yes	QA/QC procedures appropriate?	Yes	CR 7 See CAR 8	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	Yes																											
Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	Yes																											
Source clearly referenced?	Yes																											
Correct value provided for estimation?	Yes																											
Has this value been verified?	No																											
Measurement method correctly described?	Yes																											
Correct reference to standards?	No																											
Indication of accuracy provided?	No																											
QA/QC procedures described?	Yes																											
QA/QC procedures appropriate?	Yes																											
B.7.1.3. Parameter Title: Moisture content of the biomass residues	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td></td><td></td></tr></table>	Monitoring Checklist	Yes / No			CAR 11	<input checked="" type="checkbox"/>																				
Monitoring Checklist	Yes / No																											

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		Title in line with methodology?	No																									
		Data unit correctly expressed?	No																									
		Appropriate description of parameter?	No																									
		Source clearly referenced?	No																									
		Correct value provided for estimation?	No																									
		Has this value been verified?	No																									
		Measurement method correctly described?	No																									
		Correct reference to standards?	No																									
		Indication of accuracy provided?	No																									
		QA/QC procedures described?	No																									
		QA/QC procedures appropriate?	No																									
		<u>Corrective Action Request 11:</u> According to the methodology, the monitoring of moisture content of the biomass residues is a must, pls. add it into B.7.1. of the PDD. Moreover, the related measuring equipment, the accuracy of instrument, the monitoring procedure and the calibration process shall be clearly described in the PDD.																										
B.7.1.4. Parameter Title: CH4 emission factor for the combustion of biomass residues in the project plant EF <sub>CH4,BF</sub>	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided for estimation?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided for estimation?	Yes	Has this value been verified?	Yes	Measurement method correctly described?	No	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CAR 12	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	No																											
Data unit correctly expressed?	No																											
Appropriate description of parameter?	No																											
Source clearly referenced?	No																											
Correct value provided for estimation?	Yes																											
Has this value been verified?	Yes																											
Measurement method correctly described?	No																											
Correct reference to standards?	No																											
Indication of accuracy provided?	No																											
QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											

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		<u>Corrective Action Request 12:</u> At the validation phase, the IPCC default value is used. It has been verified that the figure is consistent to the Table 3 of the methodology. However, the PDD does not provide the method on how to monitor this parameter in the crediting period. Pls. clarify this in Chapter B.7.1. of the PDD.																										
B.7.1.5. Parameter Title: Average round trip distance (from and to) between biomass fuel supply sites and the project site AVD <sub>y</sub>	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>Yes</td></tr><tr><td>Correct reference to standards?</td><td>Yes</td></tr><tr><td>Indication of accuracy provided?</td><td>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>Yes</td></tr><tr><td>QA/QC procedures appropriate?</td><td>Yes</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	Yes	Has this value been verified?	Yes	Measurement method correctly described?	Yes	Correct reference to standards?	Yes	Indication of accuracy provided?	Yes	QA/QC procedures described?	Yes	QA/QC procedures appropriate?	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	Yes																											
Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	Yes																											
Source clearly referenced?	Yes																											
Correct value provided for estimation?	Yes																											
Has this value been verified?	Yes																											
Measurement method correctly described?	Yes																											
Correct reference to standards?	Yes																											
Indication of accuracy provided?	Yes																											
QA/QC procedures described?	Yes																											
QA/QC procedures appropriate?	Yes																											
B.7.1.6. Parameter Title: Number of truck trips for the transportation of biomass. N <sub>y</sub>		<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided for estimation?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided for estimation?	N.A.	Has this value been verified?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
Monitoring Checklist	Yes / No																											
Title in line with methodology?	N.A.																											
Data unit correctly expressed?	N.A.																											
Appropriate description of parameter?	N.A.																											
Source clearly referenced?	N.A.																											
Correct value provided for estimation?	N.A.																											
Has this value been verified?	N.A.																											

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		Correct reference to standards?	N.A.		
		Indication of accuracy provided?	N.A.		
		QA/QC procedures described?	N.A.		
		QA/QC procedures appropriate?	N.A.		
		Not applicable, because Option 1 is chosen for the project emission calculation, this parameter needs not be considered.			
B.7.1.7. Parameter Title: Average truck load of the trucks used for transportation of biomass. TL <sub>y</sub>	1, 28, 2	Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Title in line with methodology?	Yes		
		Data unit correctly expressed?	Yes		
		Appropriate description of parameter?	Yes		
		Source clearly referenced?	Yes		
		Correct value provided for estimation?	Yes		
		Has this value been verified?	Yes		
		Measurement method correctly described?	Yes		
		Correct reference to standards?	Yes		
		Indication of accuracy provided?	Yes		
		QA/QC procedures described?	Yes		
		QA/QC procedures appropriate?	Yes		
B.7.1.8. Parameter Title: Average CO2 emission factor for the trucks during the year y EF <sub>km,CO2,y</sub>	1, 28, 2	Monitoring Checklist	Yes / No	CAR 13	<input checked="" type="checkbox"/>
		Title in line with methodology?	No		
		Data unit correctly expressed?	No		
		Appropriate description of parameter?	No		
		Source clearly referenced?	No		
		Correct value provided for estimation?	Yes		
		Has this value been verified?	Yes		
		Measurement method correctly described?	No		



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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS		PDD in GSP	Final PDD																								
		<table><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table>	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No																			
Correct reference to standards?	No																												
Indication of accuracy provided?	No																												
QA/QC procedures described?	No																												
QA/QC procedures appropriate?	No																												
		<u>Corrective Action Request 13:</u> The methodology does not provide the reference or formula on how to obtain the figure of this parameter. A formula together with the related process are developed by the project developer and demonstrated in the PDD, which have been verified by the audit team. As required by the methodology, EF <sub>km,CO2,y</sub> shall be monitored regularly, pls. add it into the revised PDD.																											
B.7.1.9. Parameter Title: Mass or volume unit FC <sub>TR,i,y</sub>		<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided for estimation?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr><tr><td>Correct reference to standards?</td><td>N.A.</td></tr><tr><td>Indication of accuracy provided?</td><td>N.A.</td></tr><tr><td>QA/QC procedures described?</td><td>N.A.</td></tr><tr><td>QA/QC procedures appropriate?</td><td>N.A.</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided for estimation?	N.A.	Has this value been verified?	N.A.	Measurement method correctly described?	N.A.	Correct reference to standards?	N.A.	Indication of accuracy provided?	N.A.	QA/QC procedures described?	N.A.	QA/QC procedures appropriate?	N.A.		☑	☑
Monitoring Checklist	Yes / No																												
Title in line with methodology?	N.A.																												
Data unit correctly expressed?	N.A.																												
Appropriate description of parameter?	N.A.																												
Source clearly referenced?	N.A.																												
Correct value provided for estimation?	N.A.																												
Has this value been verified?	N.A.																												
Measurement method correctly described?	N.A.																												
Correct reference to standards?	N.A.																												
Indication of accuracy provided?	N.A.																												
QA/QC procedures described?	N.A.																												
QA/QC procedures appropriate?	N.A.																												
		Not applicable, because Option 1 is chosen for the project emission calculation. This parameter needs not be considered.																											
B.7.1.10. Parameter Title: CO2 emission factor for fossil fuel type i EF <sub>CO2,FF,i</sub>	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	No		CAR 14 See CAR 8	☑																				
Monitoring Checklist	Yes / No																												
Title in line with methodology?	No																												

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		<table><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table>	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided for estimation?	No	Has this value been verified?	No	Measurement method correctly described?	No	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No							
Data unit correctly expressed?	No																												
Appropriate description of parameter?	No																												
Source clearly referenced?	No																												
Correct value provided for estimation?	No																												
Has this value been verified?	No																												
Measurement method correctly described?	No																												
Correct reference to standards?	No																												
Indication of accuracy provided?	No																												
QA/QC procedures described?	No																												
QA/QC procedures appropriate?	No																												
		<p><u>Corrective Action Request 14:</u> According to CAR 8, this parameter is not taken into the calculation of the project emissions, consequently, it has not been included in the required monitoring parameters list. Pls. correct.</p>																											
B.7.1.11. Parameter Title: CO2 emission factor of the fossil fuel type i used for heat generation in the absence the project activity EF <sub>CO2,BL,heat,i</sub>		<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided for estimation?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr><tr><td>Correct reference to standards?</td><td>N.A.</td></tr><tr><td>Indication of accuracy provided?</td><td>N.A.</td></tr><tr><td>QA/QC procedures described?</td><td>N.A.</td></tr><tr><td>QA/QC procedures appropriate?</td><td>N.A.</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided for estimation?	N.A.	Has this value been verified?	N.A.	Measurement method correctly described?	N.A.	Correct reference to standards?	N.A.	Indication of accuracy provided?	N.A.	QA/QC procedures described?	N.A.	QA/QC procedures appropriate?	N.A.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																												
Title in line with methodology?	N.A.																												
Data unit correctly expressed?	N.A.																												
Appropriate description of parameter?	N.A.																												
Source clearly referenced?	N.A.																												
Correct value provided for estimation?	N.A.																												
Has this value been verified?	N.A.																												
Measurement method correctly described?	N.A.																												
Correct reference to standards?	N.A.																												
Indication of accuracy provided?	N.A.																												
QA/QC procedures described?	N.A.																												
QA/QC procedures appropriate?	N.A.																												
		<p>The generation of heat is not considered in the proposed project, hence, this parameter is inapplicable.</p>																											

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B.7.1.12. Parameter Title: Quantity of fossil fuel type i combusted in the biomass residue fired power plant during the year y FF <sub>project plant,i,y</sub>	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table> <p><u>Corrective Action Request 15:</u> Referring to CAR 8, the amount used for the on site emissions of fossil fuel consumption is not clear. Moreover, this parameter shall be included in Chapter B.7.1. of the PDD. Pls. deliver the information of measuring equipment (including accuracy), measurement procedure and calibration process as well.</p>	Monitoring Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided for estimation?	No	Has this value been verified?	No	Measurement method correctly described?	No	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CAR 15 See CAR 8	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	No																											
Data unit correctly expressed?	No																											
Appropriate description of parameter?	No																											
Source clearly referenced?	No																											
Correct value provided for estimation?	No																											
Has this value been verified?	No																											
Measurement method correctly described?	No																											
Correct reference to standards?	No																											
Indication of accuracy provided?	No																											
QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											
B.7.1.13. Parameter Title: Quantity of fossil fuel type i combusted at the project site for other purposes that are attributable to the project activity during the year y FF <sub>project site,i,y</sub>	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided for estimation?	No	Has this value been verified?	No	Measurement method correctly described?	No	Correct reference to standards?	No	Indication of accuracy provided?	No	See CAR 15	<input checked="" type="checkbox"/>				
Monitoring Checklist	Yes / No																											
Title in line with methodology?	No																											
Data unit correctly expressed?	No																											
Appropriate description of parameter?	No																											
Source clearly referenced?	No																											
Correct value provided for estimation?	No																											
Has this value been verified?	No																											
Measurement method correctly described?	No																											
Correct reference to standards?	No																											
Indication of accuracy provided?	No																											

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		QA/QC procedures described?	No		
		QA/QC procedures appropriate?	No		
		Pls. kindly refer to CAR 15.			
B.7.1.14. Parameter Title: Quantity of steam diverted from other boilers to the project plant.		Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Title in line with methodology?	N.A.		
		Data unit correctly expressed?	N.A.		
		Appropriate description of parameter?	N.A.		
		Source clearly referenced?	N.A.		
		Correct value provided for estimation?	N.A.		
		Has this value been verified?	N.A.		
		Measurement method correctly described?	N.A.		
		Correct reference to standards?	N.A.		
		Indication of accuracy provided?	N.A.		
		QA/QC procedures described?	N.A.		
		QA/QC procedures appropriate?	N.A.		
		The generation of heat is not included in the project activity, hence this parameter is not applicable.			
B.7.1.15. Parameter Title: Average net efficiency of steam generation in the plant(s) from where steam is diverted to the project plant		Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Title in line with methodology?	N.A.		
		Data unit correctly expressed?	N.A.		
		Appropriate description of parameter?	N.A.		
		Source clearly referenced?	N.A.		
		Correct value provided for estimation?	N.A.		
		Has this value been verified?	N.A.		
		Measurement method correctly described?	N.A.		
		Correct reference to standards?	N.A.		
		Indication of accuracy provided?	N.A.		

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		QA/QC procedures described?	N.A.																										
		QA/QC procedures appropriate?	N.A.																										
		The generation of heat is not included in the project activity, hence this parameter is not applicable.																											
B.7.1.16. Parameter Title: Net quantity of electricity generated in the project plant during the year y EG <sub>project plant,y</sub>	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>Yes</td></tr><tr><td>Correct value provided for estimation?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>Yes</td></tr><tr><td>Indication of accuracy provided?</td><td>Yes</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table> <p><u>Clarification Request 8:</u> The description in the PDD does not provide a clear description on the following information:</p> <ul style="list-style-type: none"><li>- the locations of meters are installed and the accuracy of all the meters;</li><li>- whether these meters would be double checked;</li><li>- procedure to measure the electricity supplied from grid, in case the project activity could not produce electricity by itself.</li></ul> <p>Pls. add the related explanation, including a sketch map, into the revised PDD.</p>		Monitoring Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	Yes	Correct value provided for estimation?	Yes	Has this value been verified?	Yes	Measurement method correctly described?	No	Correct reference to standards?	Yes	Indication of accuracy provided?	Yes	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CR 8	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																												
Title in line with methodology?	No																												
Data unit correctly expressed?	Yes																												
Appropriate description of parameter?	Yes																												
Source clearly referenced?	Yes																												
Correct value provided for estimation?	Yes																												
Has this value been verified?	Yes																												
Measurement method correctly described?	No																												
Correct reference to standards?	Yes																												
Indication of accuracy provided?	Yes																												
QA/QC procedures described?	No																												
QA/QC procedures appropriate?	No																												
B.7.1.17. Parameter Title:		<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr></table>		Monitoring Checklist	Yes / No	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>																						
Monitoring Checklist	Yes / No																												

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Net quantity of electricity generated in the fossil fuel fired captive power plant during the year y EG <sub>CP,y</sub>		Title in line with methodology?	N.A.			
		Data unit correctly expressed?	N.A.			
		Appropriate description of parameter?	N.A.			
		Source clearly referenced?	N.A.			
		Correct value provided for estimation?	N.A.			
		Has this value been verified?	N.A.			
		Measurement method correctly described?	N.A.			
		Correct reference to standards?	N.A.			
		Indication of accuracy provided?	N.A.			
		QA/QC procedures described?	N.A.			
		QA/QC procedures appropriate?	N.A.			
		There's no captive power plant, hence this parameter is not applicable.				
B.7.1.18. Parameter Title: Net quantity of electricity generated in all power units at the project site, generated from firing the same type(s) of biomass residues as in the project plant, including the new power unit installed as part of the project activity and any previously existing units, during the year y EG <sub>total,y</sub>		Monitoring Checklist		Yes / No	☑	☑
		Title in line with methodology?	N.A.			
		Data unit correctly expressed?	N.A.			
		Appropriate description of parameter?	N.A.			
		Source clearly referenced?	N.A.			
		Correct value provided for estimation?	N.A.			
		Has this value been verified?	N.A.			
		Measurement method correctly described?	N.A.			
		Correct reference to standards?	N.A.			
		Indication of accuracy provided?	N.A.			
		QA/QC procedures described?	N.A.			
		QA/QC procedures appropriate?	N.A.			
		This parameter is not applicable, because the proposed project is a new installed plant. No biomass residues fired project is existing at the defined site .				

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD																								
B.7.1.19. Parameter Title: Net quantity of heat generated from firing biomass in the project plant $Q_{\text{project plant},y}$		<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided for estimation?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr><tr><td>Correct reference to standards?</td><td>N.A.</td></tr><tr><td>Indication of accuracy provided?</td><td>N.A.</td></tr><tr><td>QA/QC procedures described?</td><td>N.A.</td></tr><tr><td>QA/QC procedures appropriate?</td><td>N.A.</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided for estimation?	N.A.	Has this value been verified?	N.A.	Measurement method correctly described?	N.A.	Correct reference to standards?	N.A.	Indication of accuracy provided?	N.A.	QA/QC procedures described?	N.A.	QA/QC procedures appropriate?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Monitoring Checklist	Yes / No																									
		Title in line with methodology?	N.A.																									
		Data unit correctly expressed?	N.A.																									
		Appropriate description of parameter?	N.A.																									
		Source clearly referenced?	N.A.																									
		Correct value provided for estimation?	N.A.																									
		Has this value been verified?	N.A.																									
		Measurement method correctly described?	N.A.																									
		Correct reference to standards?	N.A.																									
		Indication of accuracy provided?	N.A.																									
		QA/QC procedures described?	N.A.																									
		QA/QC procedures appropriate?	N.A.																									
		Since the generation of heat is not considered in this project, this parameter is inapplicable.																										
B.7.1.20. Parameter Title: Net quantity of heat generated in all cogeneration units at the project site, generated from firing the same type(s) of biomass residues as in the project plant, including the cogeneration unit installed as part of the project activity and any previously existing units, during the year y $Q_{\text{total},y}$		<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided for estimation?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr><tr><td>Correct reference to standards?</td><td>N.A.</td></tr><tr><td>Indication of accuracy provided?</td><td>N.A.</td></tr><tr><td>QA/QC procedures described?</td><td>N.A.</td></tr><tr><td>QA/QC procedures appropriate?</td><td>N.A.</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided for estimation?	N.A.	Has this value been verified?	N.A.	Measurement method correctly described?	N.A.	Correct reference to standards?	N.A.	Indication of accuracy provided?	N.A.	QA/QC procedures described?	N.A.	QA/QC procedures appropriate?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
		Monitoring Checklist	Yes / No																									
		Title in line with methodology?	N.A.																									
		Data unit correctly expressed?	N.A.																									
		Appropriate description of parameter?	N.A.																									
		Source clearly referenced?	N.A.																									
		Correct value provided for estimation?	N.A.																									
		Has this value been verified?	N.A.																									
		Measurement method correctly described?	N.A.																									
		Correct reference to standards?	N.A.																									
		Indication of accuracy provided?	N.A.																									
		QA/QC procedures described?	N.A.																									
		QA/QC procedures appropriate?	N.A.																									
		Since the generation of heat is not considered in this project, this																										

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		parameter is inapplicable.																										
B.7.1.21. Parameter Title: Net calorific value of the fossil fuel type i NCV <sub>i</sub>	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided for estimation?</td><td>Yes</td></tr><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table> <p><u>Corrective Action Request 16:</u> Pls. add the parameter, NCV<sub>i</sub> into the list in B.7.1. If the IPCC default value is adopted, pls. present the procedure to ensure the appropriateness of the data would be reviewed annually.</p>	Monitoring Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided for estimation?	Yes	Has this value been verified?	Yes	Measurement method correctly described?	No	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CAR 16	☑
Monitoring Checklist	Yes / No																											
Title in line with methodology?	No																											
Data unit correctly expressed?	No																											
Appropriate description of parameter?	No																											
Source clearly referenced?	No																											
Correct value provided for estimation?	Yes																											
Has this value been verified?	Yes																											
Measurement method correctly described?	No																											
Correct reference to standards?	No																											
Indication of accuracy provided?	No																											
QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											



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B.7.1.22. Parameter Title: Net calorific value of biomass residue type k NCV <sub>k</sub>	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>Yes</td></tr><tr><td>Data unit correctly expressed?</td><td>Yes</td></tr><tr><td>Appropriate description of parameter?</td><td>Yes</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table> <p><u>Clarification Request 9:</u> If the on site audit is executed, the qualified testing institution has not been determined. If the request of registration could be decided before, pls. deliver the authorized certificate of the institution to DOE. Furthermore, pls. kindly put in the related testing regulations into the PDD, which includes but not limited to:</p> <ul style="list-style-type: none"><li>- Monitoring frequency: at least every 6 months;</li><li>- The sample shall be dry biomass;</li><li>- Equipments used for testing (the accuracy and calibration process of these equipments);</li><li>- QA/QC procedures.</li></ul>	Monitoring Checklist	Yes / No	Title in line with methodology?	Yes	Data unit correctly expressed?	Yes	Appropriate description of parameter?	Yes	Source clearly referenced?	No	Correct value provided for estimation?	No	Has this value been verified?	No	Measurement method correctly described?	No	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CR 9	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	Yes																											
Data unit correctly expressed?	Yes																											
Appropriate description of parameter?	Yes																											
Source clearly referenced?	No																											
Correct value provided for estimation?	No																											
Has this value been verified?	No																											
Measurement method correctly described?	No																											
Correct reference to standards?	No																											
Indication of accuracy provided?	No																											
QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											
B.7.1.23. Parameter Title: CH4 emission factor for uncontrolled burning of the biomass residue type k during the year y EF <sub>burning,CH4,k,y</sub>	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided for estimation?</td><td>Yes</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided for estimation?	Yes	CAR 17	<input checked="" type="checkbox"/>												
Monitoring Checklist	Yes / No																											
Title in line with methodology?	No																											
Data unit correctly expressed?	No																											
Appropriate description of parameter?	No																											
Source clearly referenced?	No																											
Correct value provided for estimation?	Yes																											

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		<table><tr><td>Has this value been verified?</td><td>Yes</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table>	Has this value been verified?	Yes	Measurement method correctly described?	No	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No															
Has this value been verified?	Yes																												
Measurement method correctly described?	No																												
Correct reference to standards?	No																												
Indication of accuracy provided?	No																												
QA/QC procedures described?	No																												
QA/QC procedures appropriate?	No																												
		<u>Corrective Action Request 17:</u> Pls. add the parameter, $EF_{\text{burning,CH}_4,k,y}$ , into the list in B.7.1. If the IPCC default value is adopted, pls. present the procedure to ensure the appropriateness of the data that would be reviewed annually.																											
B.7.1.24. Parameter Title: Average net energy efficiency of heat generation in the boiler that would generate heat in the absence of the project activity ε boiler	1, 28, 2	<table><tr><td>Monitoring Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided for estimation?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr><tr><td>Correct reference to standards?</td><td>N.A.</td></tr><tr><td>Indication of accuracy provided?</td><td>N.A.</td></tr><tr><td>QA/QC procedures described?</td><td>N.A.</td></tr><tr><td>QA/QC procedures appropriate?</td><td>N.A.</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided for estimation?	N.A.	Has this value been verified?	N.A.	Measurement method correctly described?	N.A.	Correct reference to standards?	N.A.	Indication of accuracy provided?	N.A.	QA/QC procedures described?	N.A.	QA/QC procedures appropriate?	N.A.		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																												
Title in line with methodology?	N.A.																												
Data unit correctly expressed?	N.A.																												
Appropriate description of parameter?	N.A.																												
Source clearly referenced?	N.A.																												
Correct value provided for estimation?	N.A.																												
Has this value been verified?	N.A.																												
Measurement method correctly described?	N.A.																												
Correct reference to standards?	N.A.																												
Indication of accuracy provided?	N.A.																												
QA/QC procedures described?	N.A.																												
QA/QC procedures appropriate?	N.A.																												
		The heat generation is not considered in this project, so this parameter is not applicable.																											
B.7.1.25. Parameter Title: Demonstration that the biomass residue type k from a specific source would		<table><tr><td>Monitoring Checklist</td><td>Yes / No</td></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	N.A.		<input checked="" type="checkbox"/>																					
Monitoring Checklist	Yes / No																												
Title in line with methodology?	N.A.																												

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continuesly not be collected or utilized, e.g. by an assessment whether a market has emerged for that type of biomass residue (if yes, leakage is assumed not to be ruled out) or by showing that it would still not be feasible to utilize the biomass residues for any purposes.		Data unit correctly expressed?	N.A.			
		Appropriate description of parameter?	N.A.			
		Source clearly referenced?	N.A.			
		Correct value provided for estimation?	N.A.			
		Has this value been verified?	N.A.			
		Measurement method correctly described?	N.A.			
		Correct reference to standards?	N.A.			
		Indication of accuracy provided?	N.A.			
		QA/QC procedures described?	N.A.			
		QA/QC procedures appropriate?	N.A.			
		The L2 is used to demonstrate that the leakage emission needs not to be considered, hence, this monitoring procedure is not applicable.				
B.7.1.26. Parameter Title: Quantity of biomass residues of type k that are utilized (e.g. for energy generation or as feedstock) in the defined geographical region	1, 28, 2	Monitoring Checklist		Yes / No	CAR 18	☑
		Title in line with methodology?		No		
		Data unit correctly expressed?		No		
		Appropriate description of parameter?		No		
		Source clearly referenced?		No		
		Correct value provided for estimation?		No		
		Has this value been verified?		No		
		Measurement method correctly described?		No		
		Correct reference to standards?		No		
		Indication of accuracy provided?		No		
		QA/QC procedures described?		No		
		QA/QC procedures appropriate?		No		
		<u>Corrective Action Request 18:</u> The procedure to acquire the yearly quantity of available biomass residues and that are used in the defined region shall be included				

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		in the revised PDD. Furthermore, pls. also consider the issue raised from CAR 9.																										
B.7.1.27. Parameter Title: Quantity of available biomass residues of type k in the region	1, 28, 2	<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr><td>Title in line with methodology?</td><td>No</td></tr> <tr><td>Data unit correctly expressed?</td><td>No</td></tr> <tr><td>Appropriate description of parameter?</td><td>No</td></tr> <tr><td>Source clearly referenced?</td><td>No</td></tr> <tr><td>Correct value provided for estimation?</td><td>No</td></tr> <tr><td>Has this value been verified?</td><td>No</td></tr> <tr><td>Measurement method correctly described?</td><td>No</td></tr> <tr><td>Correct reference to standards?</td><td>No</td></tr> <tr><td>Indication of accuracy provided?</td><td>No</td></tr> <tr><td>QA/QC procedures described?</td><td>No</td></tr> <tr><td>QA/QC procedures appropriate?</td><td>No</td></tr> </tbody> </table> <p>Pls. refer to B.7.1.26 of the protocol.</p>	Monitoring Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided for estimation?	No	Has this value been verified?	No	Measurement method correctly described?	No	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	See CAR 18	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	No																											
Data unit correctly expressed?	No																											
Appropriate description of parameter?	No																											
Source clearly referenced?	No																											
Correct value provided for estimation?	No																											
Has this value been verified?	No																											
Measurement method correctly described?	No																											
Correct reference to standards?	No																											
Indication of accuracy provided?	No																											
QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											
B.7.1.28. Parameter Title: Availability of a surplus of biomass residue type k (which can not be sold or utilized) at the ultimate supplier to the project and a representative sample of other suppliers in the defined geographical region.		<table border="1"> <thead> <tr> <th>Monitoring Checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr><td>Title in line with methodology?</td><td>N.A.</td></tr> <tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr> <tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr> <tr><td>Source clearly referenced?</td><td>N.A.</td></tr> <tr><td>Correct value provided for estimation?</td><td>N.A.</td></tr> <tr><td>Has this value been verified?</td><td>N.A.</td></tr> <tr><td>Measurement method correctly described?</td><td>N.A.</td></tr> <tr><td>Correct reference to standards?</td><td>N.A.</td></tr> <tr><td>Indication of accuracy provided?</td><td>N.A.</td></tr> <tr><td>QA/QC procedures described?</td><td>N.A.</td></tr> <tr><td>QA/QC procedures appropriate?</td><td>N.A.</td></tr> </tbody> </table>	Monitoring Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided for estimation?	N.A.	Has this value been verified?	N.A.	Measurement method correctly described?	N.A.	Correct reference to standards?	N.A.	Indication of accuracy provided?	N.A.	QA/QC procedures described?	N.A.	QA/QC procedures appropriate?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	N.A.																											
Data unit correctly expressed?	N.A.																											
Appropriate description of parameter?	N.A.																											
Source clearly referenced?	N.A.																											
Correct value provided for estimation?	N.A.																											
Has this value been verified?	N.A.																											
Measurement method correctly described?	N.A.																											
Correct reference to standards?	N.A.																											
Indication of accuracy provided?	N.A.																											
QA/QC procedures described?	N.A.																											
QA/QC procedures appropriate?	N.A.																											

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		The L2 is used to demonstrate that the leakage emission needs not be considered, hence, this monitoring procedure is not applicable.																										
B.7.1.29. Parameter Title: On-site electricity consumption attributable to the project activity during the year y $EC_{PJ,y}$	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided for estimation?</td><td>No</td></tr><tr><td>Has this value been verified?</td><td>No</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table> <p><u>Corrective Action Request 19:</u> Kept at the issue raised from CAR 8, the procedure on measuring the electricity consumed because of the project activity on site shall be added into the PDD. Moreover, the measurement instruments and the relevant calibration process shall also be delivered.</p>	Monitoring Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided for estimation?	No	Has this value been verified?	No	Measurement method correctly described?	No	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CAR 19	☑
Monitoring Checklist	Yes / No																											
Title in line with methodology?	No																											
Data unit correctly expressed?	No																											
Appropriate description of parameter?	No																											
Source clearly referenced?	No																											
Correct value provided for estimation?	No																											
Has this value been verified?	No																											
Measurement method correctly described?	No																											
Correct reference to standards?	No																											
Indication of accuracy provided?	No																											
QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											
B.7.1.30. Parameter Title: Use the latest approved version of ACM0002 to calculate the grid emission factor. If the power generation capacity of the project plant is less or equal to 15 MW, project participants may use the average CO2 emission factor of the electricity system, as referred to in option (d) in step 1 of the baseline determination in ACM0002.	1, 28, 2	As mentioned above, the scenario of project activity fulfills the criteria of implementing the ACM0002 for the $EF_{grid,y}$ estimation. Stated in the PDD, the ex-ante approach is chosen. Hence, this parameter needs not to be monitored in the 1 <sup>st</sup> crediting period.	☑	☑																								

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD																								
EF <sub>grid,y</sub>																												
B.7.1.31. Parameter Title: Quantity of biomass residue type k combusted in all power plants at the project site during the year y Source of data: On-site measurements BF <sub>all plants,k,y</sub>		<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided for estimation?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr><tr><td>Correct reference to standards?</td><td>N.A.</td></tr><tr><td>Indication of accuracy provided?</td><td>N.A.</td></tr><tr><td>QA/QC procedures described?</td><td>N.A.</td></tr><tr><td>QA/QC procedures appropriate?</td><td>N.A.</td></tr></table> <p>This parameter only applies to scenario 10, so the project developer needs not consider it.</p>	Monitoring Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided for estimation?	N.A.	Has this value been verified?	N.A.	Measurement method correctly described?	N.A.	Correct reference to standards?	N.A.	Indication of accuracy provided?	N.A.	QA/QC procedures described?	N.A.	QA/QC procedures appropriate?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	N.A.																											
Data unit correctly expressed?	N.A.																											
Appropriate description of parameter?	N.A.																											
Source clearly referenced?	N.A.																											
Correct value provided for estimation?	N.A.																											
Has this value been verified?	N.A.																											
Measurement method correctly described?	N.A.																											
Correct reference to standards?	N.A.																											
Indication of accuracy provided?	N.A.																											
QA/QC procedures described?	N.A.																											
QA/QC procedures appropriate?	N.A.																											
B.7.1.32. Parameter Title: CO2 emission factor of the most carbon intensive fuel used in the country EF <sub>CO2,LE</sub>		<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>N.A.</td></tr><tr><td>Data unit correctly expressed?</td><td>N.A.</td></tr><tr><td>Appropriate description of parameter?</td><td>N.A.</td></tr><tr><td>Source clearly referenced?</td><td>N.A.</td></tr><tr><td>Correct value provided for estimation?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>N.A.</td></tr><tr><td>Correct reference to standards?</td><td>N.A.</td></tr><tr><td>Indication of accuracy provided?</td><td>N.A.</td></tr><tr><td>QA/QC procedures described?</td><td>N.A.</td></tr><tr><td>QA/QC procedures appropriate?</td><td>N.A.</td></tr></table>	Monitoring Checklist	Yes / No	Title in line with methodology?	N.A.	Data unit correctly expressed?	N.A.	Appropriate description of parameter?	N.A.	Source clearly referenced?	N.A.	Correct value provided for estimation?	N.A.	Has this value been verified?	N.A.	Measurement method correctly described?	N.A.	Correct reference to standards?	N.A.	Indication of accuracy provided?	N.A.	QA/QC procedures described?	N.A.	QA/QC procedures appropriate?	N.A.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Monitoring Checklist	Yes / No																											
Title in line with methodology?	N.A.																											
Data unit correctly expressed?	N.A.																											
Appropriate description of parameter?	N.A.																											
Source clearly referenced?	N.A.																											
Correct value provided for estimation?	N.A.																											
Has this value been verified?	N.A.																											
Measurement method correctly described?	N.A.																											
Correct reference to standards?	N.A.																											
Indication of accuracy provided?	N.A.																											
QA/QC procedures described?	N.A.																											
QA/QC procedures appropriate?	N.A.																											

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B.7.1.33. Parameter Title: CO2 emission factor for the fossil fuel used in the captive power plant EF <sub>CP,CO2</sub>	1, 28, 2	<table><tr><th>Monitoring Checklist</th><th>Yes / No</th></tr><tr><td>Title in line with methodology?</td><td>No</td></tr><tr><td>Data unit correctly expressed?</td><td>No</td></tr><tr><td>Appropriate description of parameter?</td><td>No</td></tr><tr><td>Source clearly referenced?</td><td>No</td></tr><tr><td>Correct value provided for estimation?</td><td>N.A.</td></tr><tr><td>Has this value been verified?</td><td>N.A.</td></tr><tr><td>Measurement method correctly described?</td><td>No</td></tr><tr><td>Correct reference to standards?</td><td>No</td></tr><tr><td>Indication of accuracy provided?</td><td>No</td></tr><tr><td>QA/QC procedures described?</td><td>No</td></tr><tr><td>QA/QC procedures appropriate?</td><td>No</td></tr></table> <p><u>Corrective Action Request 20:</u> As demonstrated in the PDD, L2 is applied to the project activity at the validation stage. However, in the crediting period, in case the leakage could not be ruled out as per the criteria of L2, the emission due to leakage shall be taken for the emissions reduction calculation. Hence, the parameter, EF<sub>CP,CO2</sub>, shall be monitored periodically.</p>	Monitoring Checklist	Yes / No	Title in line with methodology?	No	Data unit correctly expressed?	No	Appropriate description of parameter?	No	Source clearly referenced?	No	Correct value provided for estimation?	N.A.	Has this value been verified?	N.A.	Measurement method correctly described?	No	Correct reference to standards?	No	Indication of accuracy provided?	No	QA/QC procedures described?	No	QA/QC procedures appropriate?	No	CAR 20	☑
Monitoring Checklist	Yes / No																											
Title in line with methodology?	No																											
Data unit correctly expressed?	No																											
Appropriate description of parameter?	No																											
Source clearly referenced?	No																											
Correct value provided for estimation?	N.A.																											
Has this value been verified?	N.A.																											
Measurement method correctly described?	No																											
Correct reference to standards?	No																											
Indication of accuracy provided?	No																											
QA/QC procedures described?	No																											
QA/QC procedures appropriate?	No																											
B.7.2. Description of the monitoring plan																												
B.7.2.1. Is the operational and management structure clearly described and in compliance with the envisioned situation?	1, 28, 2	Yes, the management structure is clearly characterized in the PDD, though the monitoring manual is not available at validation. The monitoring manager is responsible for the daily monitoring work at the project site, including data recording, archiving and preparing the monitoring report periodically. The Chinese CDM project director at the head office in Beijing is in charge of reviewing the monitoring reports.	☑	☑																								

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B.7.2.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	1, 28, 2	Pls. see B.7.1.1. of the protocol.	See CAR 11-20 CR 7-9	<input checked="" type="checkbox"/>
B.7.2.3. Does the monitoring plan provide current good monitoring practice?	1, 28, 2	Additional description is required to deliver. Pls. refer to CAR 11-10, CR 7-9.	See CAR 11-20 CR 7-9	<input checked="" type="checkbox"/>
B.7.2.4. If applicable: Does Annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?	1, 28, 2	There's no additional content in Annex 4 of the PDD, hence, this section is inapplicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>B.8. Date of completion of the application of the baseline study and monitoring methodology an the name of the responsible person(s)/entity(ies)</b>				
B.8.1. Is there any indication of a date when the baseline was determined?	1, 28, 2	The baseline is determined on Nov. 28 <sup>th</sup> , 2006.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.2. Is this consistent with the time line of the PDD history?	1, 28, 2	Yes, it is also the day of accomplishing the PDD which is used for both on site assessment and GSP.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.3. Is the information on the person(s) / entity(ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?	1, 28, 2	The audit team has verified on site that the PDD is developed by the Global Climate Change Institute, Tsinghua University. The information presented in Chapter B.8 is correct.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.8.4. Is information provided whether this person / entity is also considered a project participant?	1, 28, 2	The Global Climate Change Institute, Tsinghua University is not the project participant of proposed project.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>



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<b>C. Duration of the project activity / crediting period</b>				
<b>C.1. Duration of the project activity</b>				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	1, 28	Pls. refer to A.4.4.1. of the protocol.	See CAR 1	<input checked="" type="checkbox"/>
<b>C.2. Choice of the crediting period and related information</b>				
C.2.1. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	1, 28	Allowing for the lifetime of the project activity 25 years are assumed. It seems to be reasonable that the max. 7 years with potential for 2 renewals are chosen as the crediting period.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>D. Environmental impacts</b>				
<b>D.1. Documentation on the analysis of the environmental impacts, including transboundary impacts</b>				
D.1.1. Has the analysis of the environmental impacts of the project activity been sufficiently described?	1, 28, 26, 27	Yes, the environmental impacts of the project activity such as noise, visual impacts, interference with communication, land use, air quality and water usage have been clearly described.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved?	1, 28, 26, 27	Yes, an EIA is a must in the P. R. China for new installation of power plant. The EIA survey was carried out by Hebei Zhonglian Energy Environmental Protection Co., Ltd. and issued in Mar., 2006. The EIA was approved by the EPB of Hebei Province on Mar., 2006. The documents have been reviewed by the DOE.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.1.3. Will the project create any adverse environmental effects?	1, 28,	<u>Corrective Action Request 21:</u> Referred to the EIA and the approval of EIA, the smoke and flue	CAR 21	<input checked="" type="checkbox"/>

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	26, 27	gas by-produced by the project activity shall be monitored and shall not exceed the upper limit of the relevant national standards. Pls. add the detailed requirement delivered by approved EIA into the revised PDD.		
D.1.4. Were transboundary environmental impacts identified in the analysis?		The proposed biomass project locates within China, hence, this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>D.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party</b>				
D.2.1. Have the identified environmental impacts been addressed in the project design sufficiently?	1, 28, 26, 27	Referred to the EIA and the Approval of EIA, the impacts on the environment are not significant.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.2. Does the project comply with environmental legislation in the host country?	1, 28, 26, 27	Yes, it does.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>E. Stakeholders' comments</b>				
<b>E.1. Brief description how comments by local stakeholders have been invited and compiled</b>				
E.1.1. Have relevant stakeholders been consulted?	1, 28, 5	<u>Corrective Action Request 22:</u> A survey was carried out while preparing the EIA, however, because it only concentrates on the environmental impacts due to the project activity. In other words, the stakeholders had not been consulted with CDM issues, the local stakeholder process is not complete. An additional introduction of CDM and the relevant impacts of the proposed project shall be delivered to the stake-	CAR 22	<input checked="" type="checkbox"/>

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			holders by appropriate media. And the feedbacks shall be collected, analyzed and documented.		
E.1.2.	Have appropriate media been used to invite comments by local stakeholders?	1, 28, 5	Pls. see CAR 22.	See CAR 22	<input checked="" type="checkbox"/>
E.1.3.	If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?	1, 28, 5	A stakeholder consultation is a must when the EIA is prepared. Its purpose is obtaining the opinion on the environmental impacts which is part of the purpose of the CDM stakeholder process.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.4.	Is the undertaken stakeholder process, that was carried out, described in a complete and transparent manner?	1, 28, 5	Pls. kindly refer to CAR 22.	See CAR 22	<input checked="" type="checkbox"/>
<b>E.2. Summary of the comments received</b>					
E.2.1.	Is a summary of the received stakeholder comments provided?	1, 28, 5	Pls. kindly refer to CAR 22.	See CAR 22	<input checked="" type="checkbox"/>
<b>E.3. Report on how due account was taken of any comments received</b>					
E.3.1.	Has due account been taken of any stakeholder comments received?	1, 28, 5	Pls. kindly refer to CAR 22.	See CAR 22	<input checked="" type="checkbox"/>
<b>F. Annexes 1 - 4</b>					
<b>Annex 1: Contact Information</b>					
F.1.1.	Is the information provided consistent with the one given under section A.3?	1, 28, 5	Please see A.3.2. of the protocol.	Open Issue	<input checked="" type="checkbox"/>
F.1.2.	Is the information on all private participants and directly involved Parties pre-	1, 28, 5	Please see A.3.2. of the protocol.	Open Issue	<input checked="" type="checkbox"/>

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sented?					
<b>Annex 2: Information regarding public funding</b>					
F.1.3.	Is the information provided on the inclusion of public funding (if any) in consistency with the actual situation presented by the project participants?	1, 28, 5	Yes. Please see A.4.5.1 of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.4.	If necessary: Is an affirmation available that any such funding from Annex-I-countries does not result in a diversion of ODA?	1, 28, 5	Referring to description of A.4.5.1 of the protocol, this section is not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Annex 3: Baseline information</b>					
F.1.5.	If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?	1, 28, 5	Pls. kindly refer CAR 8. With regard to the calculation process, quoted data shall be completely demonstrated in Annex 3 and for reviewing pls. also send the spreadsheet to the DOE.	See CAR 8	<input checked="" type="checkbox"/>
F.1.6.	Is the data provided verifiable? Has sufficient evidence been provided to the validation team?	1, 28, 5	Pls. see F.1.5. of the protocol.	See CAR 8	<input checked="" type="checkbox"/>
F.1.7.	Does the additional information substantiate / support statements given in other sections of the PDD?	1, 28, 5	Pls. see F.1.5. of the protocol.	See CAR 8	<input checked="" type="checkbox"/>
<b>Annex 4: Monitoring information</b>					
F.1.8.	If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?	1, 28, 5	There's no additional background information mentioned in Annex 4 of the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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F.1.9.	Is the information provided verifiable? Has sufficient evidence been provided to the validation team?	1, 28, 5	Pls. see F.1.8. of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.10.	Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PDD?	1, 28, 5	Pls. see F.1.8. of the protocol.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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**Table 2 Resolution of Corrective Action and Clarification Requests**

Clarifications and corrective action requests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion
<u>Corrective Action Request 1:</u> Regarding the fact that the on-site audit was carried out at the end of January, the registration day would be later than April 1 <sup>st</sup> , 2007 which is stated in the PDD. Pls. revise the starting date of crediting period in a reasonable manner.	A.4.4.1.	The starting date of crediting period is changed to Nov. 1, 2007.	<input checked="" type="checkbox"/> Closed
<u>Corrective Action Request 2:</u> Referring to the calculation of project emission in Chapter B.6.3. of the PDD, the emission caused by the consumption of electricity is zero. However, during the plant visiting, the electricity supplied from grid does be used for operation. Pls. correct accordingly.	B.3.4.	The on-site use of electricity for project activity has been included, please refer to B.6.3	<input checked="" type="checkbox"/>
<u>Corrective Action Request 3:</u> According to the methodology, the CO <sub>2</sub> emission from the combustion of biomass residues gas needs not be considered, pls. correct the statement in Table B.3..	B.3.6.	CO <sub>2</sub> emission from residual combustion has been excluded, Please refer to table B.3	<input checked="" type="checkbox"/>
The project boundary includes: <ul style="list-style-type: none"> <li>- the power plant at the project site;</li> <li>- the means for transportation of biomass to the project site, in this case, transportation is undertaken by vehicles;</li> <li>- all power plants connected physically to the North China Power Grid;</li> </ul> <u>Corrective Action Request 4:</u> If the biomass residues are dumped for leaving to decay without implementing in the project, the site where the biomass residues would have been left for decay or dumped shall also be included in the project spatial extent. Pls. add it into the revised PDD.	B.3.7.	Please refer to page 9.	<input checked="" type="checkbox"/>

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<p>During the site visiting and document review, it has been verified that most cotton straws are dumped or left to decay under mainly aerobic conditions or burnt in an uncontrolled manner without implementation of the proposed project. Whereas, one fault are detected in the baseline scenario discussion.</p> <p><u>Corrective Action Request 5:</u> There's no reason given in Chapter B.4. of the PDD to rule the Scenario B8 out. Pls. add the related information into the revised version.</p>	B.4.2.	Please refer to beginning of page 12 for detail information why the B8 is ruled out.	<input checked="" type="checkbox"/>
<p>3 analysis methods are provided according to the additionality tool (version 2). Because the proposed project generates economic benefits through the sales of electricity other than CDM revenue, therefore, the Option I (simple cost analysis) can't be taken. To determine whether install the proposed project, the benchmark IRR of power industry is the key parameter, hence, it deems that Option III (benchmark analysis) is the only applicable one.</p> <p><u>Corrective Action Request 6:</u> Because the heat generation is not taken into account, there's no revenue from heat sales, pls. revise the description of Option I at Sub-step 2a of the PDD.</p>	B.5.1.	<p>This mistake has been fixed. Please refer to sub-step 2a of B5.1</p> <p>Please seen "IRR_Weixian" in PDF</p>	<input checked="" type="checkbox"/>

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<p>The IRR with / without CDM revenue are clearly demonstrated in 2 tables at Sub-step 2c of the PDD. The spreadsheet in Chinese has been reviewed by the audit team. All the relative data for calculation are from the approved feasibility report, besides the annual consumption of cotton straws (pls. refer to CR 1). Moreover, pls. also make the revision for the following issues.</p> <p><u>Corrective Action Request 7:</u></p> <ul style="list-style-type: none"><li>- Required by the latest EB meeting, the data and calculation process on figuring out the IRR shall be added into the PDD or attached to the PDD as an annex;</li><li>- The unit of total investment in table “Key parameters for the calculation of financial indicators” shall be ‘ten thousand Yuan’, pls. correct.</li></ul>	B.5.4.	The mistake of unit has been corrected.	<input checked="" type="checkbox"/>
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<p>Yes, the justification has been fully discussed and demonstrated in the PDD based on the options provided from the latest methodology. Allowing for that the baseline scenario is the substitution of electricity from grid which is mainly supplied by thermal plants. So the methodology of ACM0002 is applied to calculate the emission factor of grid. Furthermore, as stated in the PDD, ex-ante approach is adopted. Besides issues mentioned below, most of the data are referring to the latest available Chinese Electric Power Yearbook (2003-2005), the China Energy Statistical Yearbook (2000-2005).</p> <p><u>Corrective Action Request 8:</u></p> <ul style="list-style-type: none"> <li>- According to the methodology, the <i>dry</i> weight of biomass residues shall be used for all the calculations. Hence, pls. consider the moisture content while estimating the emission reduction and demonstrate the calculation process into the revised PDD;</li> <li>- Pls. updated all the IPCC default values with the latest 2006 version;</li> <li>- The emission of on-site transportation of the biomass residues shall also be included in the calculation of Carbon dioxide emissions from on-site consumption of fossil fuels. Pls. correct Sub-step 3c of the PDD accordingly. In addition, pls. also deliver the estimation process of diesel consumption to audit team;</li> <li>- Even the OM and BM released by NDRC are adopted, for the purpose of assessment executed by DOE, EB and other global stakeholders, pls. add the complete calculation process into Annex 3 and demonstrate the entire procedures in Step 1 of B.6. of the PDD. Furthermore, pls. submit the spreadsheet to the audit team for review.</li> </ul>	<p>B.6.1.2.</p>	<p>The 12% moisture content from EIA has been adopted.</p> <p>2006 IPCC default value has been adopted. The only difference is EF of diesel.</p> <p>The emission from on-site consumption of fossil fuel has been included, please refer to sub-step 3c.</p> <p>The detail of OM and BM calculation has been added. Please refer to the B.6 and annex 3.</p>	<p><input checked="" type="checkbox"/></p>
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<p>Option L2 is used to demonstrate that the usage of the biomass residues does not result in increased fossil fuel consumption. Although the amounts of available biomass residues are inconsistent in the PDD, the smallest figure is used for L2 discussion and the abundant surplus of the cotton straws is 180% larger than that consumed at the project site. Considering the additional information obtained from the site visiting, the audit team is confident that the quantity of available cotton straws in Wei County is at least 25% larger than used. Hence, the leakage at validation stage deems to be zero.</p> <p><u>Corrective Action Request 9:</u></p> <p>Whereas, according to the methodology, the leakage shall be monitored during the crediting period in a defined geographical boundary of the region. In case, the leakage effects cannot be ruled out under the situation of L2. The emission of leakage shall be included in the emission reduction calculation. The related formula and the parameters shall be demonstrated in the revised PDD.</p>	B.6.1.6.	The formula has been added please refer to the step 4 of B6.	<input checked="" type="checkbox"/>
<p>Most of the parameters which determine the baseline and project emissions are indicated in the table B.6.2.. However, some indicators are missing.</p> <p><u>Corrective Action Request 10:</u></p> <p>Pls. add parameters, <math>NCV_c</math>, <math>FF_{\text{project plant, l, y}}</math>, <math>FF_{\text{project site, l, y}}</math>, and <math>EC_{PJ,y}</math> into the list.</p>	B.6.2.1.	These parameters have been added. Please refer to the B.6.2.1	<input checked="" type="checkbox"/>

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<p><u>Corrective Action Request 11:</u> According to the methodology, the monitoring of moisture content of the biomass residues is a must, pls. add it into B.7.1. of the PDD. Moreover, the related measuring equipment, the accuracy of instrument, the monitoring procedure and calibration process shall be clearly described in the PDD.</p>	B.7.1.3.	<p>The moisture content has been added. Please refer to B.7.1</p> <p>The instrument and its accuracy is added in B.7.1</p> <p>The measurement type is HMT2 and the accuracy is 12(±0.4).</p> <p>Please refer to "E_CAR11",</p>	☑
<p><u>Corrective Action Request 12:</u> At the validation phase, the IPCC default value is used. It has been verified that the figure is consistent to the Table 3 of the methodology. However, the PDD does not provide the method on how to monitor this parameter in the crediting period. Pls. clarify this in Chapter B.7.1. of the PDD.</p>	B.7.1.4.	<p>If the IPCC value is updated, the latest value of IPCC will be adopted.</p> <p>See as B.7.1</p>	☑
<p><u>Corrective Action Request 13:</u> The methodology does not provide the reference or formula on how to obtain the figure of this parameter. A formula together with related process are developed by the project developer and demonstrated in the PDD, which have been verified by the audit team. As required by the methodology, <math>EF_{km,CO_2,y}</math> shall be monitored regularly, pls. add it into the revised PDD.</p>	B.7.1.8.	<p>This parameter has been added, please refer to B.7.1</p>	☑
<p><u>Corrective Action Request 14:</u> According to CAR 8, this parameter is not taken into the calculation of the project emissions, consequently, it has not been included in the required monitoring parameters list. Pls. correct.</p>	B.7.1.10.	<p>Refer to CAR8</p> <p>According to page 52 of methodology, the parameters have already added in page 32 and page 33 in PDD.</p>	☑

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<p><u>Corrective Action Request 15:</u> Referring to CAR 8, the amount used for the on site emissions of fossil fuel consumption is not clear. Moreover, this parameter shall be included in the Chapter B.7.1. of the PDD. Pls. deliver the information of measuring equipment (including accuracy), measurement procedure and calibration process as well.</p>	B.7.1.12.	The diesel consumed on site will be purchased from the fuel station, and then the purchase receipt will be used for monitoring.	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request 16:</u> Pls. add the parameter, <math>NCV_i</math>, into the list in B.7.1. If the IPCC default value is adopted, pls. present the procedure to ensure the appropriateness of the data would be reviewed annually.</p>	B.7.1.21.	NCVd is the $NCV_i$ for $i=d$ , (diesel) . The national specific value has been adopted for this parameter. In PDD, we also point out the LATEST value from national energy statistics will be used.	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request 17:</u> Pls. add the parameter, <math>EF_{burning,CH_4,k,y}</math>, into the list in B.7.1. If the IPCC default value is adopted, pls. present the procedure to ensure the appropriateness of the data that would be reviewed annually.</p>	B.7.1.23.	<p>In fact, this parameter has been included. There is inconsistency in the methodology. The unit for <math>EF_{burning,CH_4,k,y}</math> is <math>tCH_4/GJ</math>, while the methodology also argued that <math>0.0027tCH_4/t</math> can be used in case of no accurate information. But the <math>tCH_4/t</math> is the unit of <math>EF_{burning,CH_4,k,y}</math> times <math>NCV_k</math>. So we use the products of <math>EF_{burning,CH_4,k,y}</math> and <math>NCV_k</math> in the monitoring table instead EF only.</p> <p>It is stated in PDD.</p> <p>This value will be fixed in the entire crediting period.</p>	<input checked="" type="checkbox"/>

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<p><u>Corrective Action Request 18:</u> The procedure to acquire the yearly quantity of available biomass residues and that are used in the defined region shall be included in the revised PDD. Furthermore, pls. also consider the issue raised from CAR 9.</p>	B.7.1.26.	In the PDD, we have argued that all information should come from the official statistics.	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request 19:</u> Kept at the issue raised from CAR 8, the procedure on measuring the electricity consumed because of the project activity on site shall be added into the PDD. Moreover, the measurement instruments and the relevant calibration process shall also be delivered.</p>	B.7.1.29.	The on-site electricity consumption has been included. We also supposed a conservative way to estimate this parameter in the PDD.	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request 20:</u> As demonstrated in the PDD, L2 is applied to the project activity at the validation stage. However, in the crediting period, in case the leakage could not be ruled out as per the criteria of L2, the emission due to leakage shall be taken for the emissions reduction calculation. Hence, the parameter, <math>EF_{CP,CO_2}</math>, shall be monitored periodically.</p>	B.7.1.33.	The $EF_{CO_2, LE}$ has been added and the most carbon-intensive fossil fuel has been identified as coke.	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request 21:</u> Referred to the EIA and the approval of EIA, the smoke and flue gas by-produced by the project activity shall be monitored and shall not exceed the upper limit of the relevant national standards. Pls. add the detailed requirement delivered by approved EIA into the revised PDD.</p>	D.1.3.	the smoke and flue gas by-produced by the project activity shall be monitored and shall not exceed the upper limit of the relevant national standards: the dust, SO <sub>2</sub> and NO <sub>x</sub> emission will be less than 16.2mg/m <sup>3</sup> , 219.8mg/m <sup>3</sup> and 300mg/m <sup>3</sup> respectively(EIA,P104).	<input checked="" type="checkbox"/>

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<p><u>Corrective Action Request 22:</u></p> <p>A survey was carried out while preparing the EIA, however, because it only concentrates on the environmental impacts due to the project activity. In other words, the stakeholders had not been consulted with CDM issues, the local stakeholder process is not complete. An additional introduction of CDM and the relevant impacts of the proposed project shall be delivered to stakeholders by appropriate media. And the feedbacks shall be collected, analyzed and documented.</p>	E.1.1.	The latest information is added.	<input checked="" type="checkbox"/>
<p>The project activity comprises the installation of a new power plant at Wei County, Hubei Province, where currently no power generation occurs and the biomass is dumped or left to decay or burned in uncontrolled manner in the absence of the proposed project. The power produced will be fed into the North China Power Grid; the heat generated will not be considered by the calculation of emission reductions.</p> <p><u>Clarification Request 1:</u></p> <ul style="list-style-type: none"> <li>- Introduced by the project owner on site, the cotton straw will be the only biomass resource utilized by the project activity, however, as stated in Table B.2 of the PDD, the corn straw will also be used. Pls. clarify which biomass residues will be utilized in the revised PDD.</li> <li>- Pls. deliver the reliable evidence to the auditor that the yearly consumption of straw is 136,100t and what's the moisture content of it?</li> </ul>	A.2.1.	Only cotton straw will be utilized.	<input checked="" type="checkbox"/>

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<p>The location of project is not clearly described in the PDD, pls. kindly add the following information into section A.4.1. of the PDD.</p> <p><u>Clarification Request 2:</u></p> <ul style="list-style-type: none"><li>- Having regard to the possibility that there are more than one county named Wei in Hebei Province, pls. kindly add the city name into the description;</li><li>- Pls. add the exact geographical coordinates;</li><li>- For the purpose of being understood well, please use maps marked with English.</li></ul>	A.4.1.1.	<p>city name (Xingtai City) is added,</p> <p>geographical coordinates and its evidence is provided</p> <p>please see "E_CR_2_1 and E_CR_2_2"</p> <p>maps marked with English is provided</p>	<input checked="" type="checkbox"/>
<p>In regard to the advanced technology which is implemented in this project, extensive initial training is needed to guarantee safe operation during the life time.</p> <p><u>Clarification Request 3:</u></p> <p>As introduced by the project owner, the related training has been provided, however, the evidence is not available during the on site assessment. Please submit the training proof, such as, training material, training contract, participant list, course agenda, etc., to the audit team for a review.</p>	A.4.3.8.	<p>The training proof has been provided</p>	<input checked="" type="checkbox"/>

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<p><u>Clarification Request 4:</u></p> <p>Since the project is a newly installed power plant, all the biomass residue for the project activity were collected at the 4<sup>th</sup> quarter of last year. In other words, the biomass stored currently has not exceeded the limitation of 1 year. However, the PDD does not provide the information which approach will be applied to ensure this criterion could be fulfilled in the whole crediting period.</p>	B.2.5.	<p>In the entire crediting period, the biomass stored will not be exceeded the limitation of 1 year.</p> <p>From the view of net calorific value (NCV) of the straw and the usual consideration of economics, the biomass used in the plant will also not stored above 1 year.</p>	<input checked="" type="checkbox"/>
<p><u>Clarification Request 5:</u></p> <p>The figures of available cotton straw for the project activity are not consistent in the PDD. In Chapter B.3., as quoted, in Wei county, the annual straws resources are 0.6 million tons, 90% of them are dumped or left to decay or burned in an uncontrolled manner. However, in Step 1 of B.5., it is stated that 75% of them are dumped or burned. But in Step 4, the amount of available straw in Wei County is only 0.38 million tons per year. Furthermore, there's no clearly identified boundary of region where the biomass residues are available for the project activity. The same numbers of EACH available biomass residues within the defined area shall be demonstrated respectively and used throughout the revised PDD.</p>	B.3.8.	<p>Because only cotton straw will be utilized, the corresponding figures have been renewed: total resource 0.38 million tons,</p> <p>Utilized rate is 15% according to the FSR.</p>	<input checked="" type="checkbox"/>
<p><u>Clarification Request 6:</u></p> <p>The reliable source of <math>NCV_c = 0.01752</math> TJ/t shall be delivered to auditor for calculating the verification.</p>	B.6.1.2.	The test report will be delivered to the auditor.	<input checked="" type="checkbox"/>
<p><u>Clarification Request 7:</u></p> <p>Besides the revision required from CAR 8, to monitor the <math>BF_{k,y}</math>, PDD shall also provide a clear description on the measuring equipment, the accuracy of this instrument and the related calibration process to monitor this parameter.</p>	B.7.1.2.	An electrical weight will be used for measuring cotton straw. The calibration procedure, accuracy can be found in the B.7.1 of this PDD.	<input checked="" type="checkbox"/>



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<p><u>Clarification Request 8:</u> The description in the PDD does not provide a clear description on the following information:</p> <ul style="list-style-type: none"> <li>- the locations of meters are installed and the accuracy of all the meters;</li> <li>- whether these meters would be double checked;</li> <li>- procedure to measure the electricity supplied from grid, in case the project activity could not produce electricity by itself.</li> </ul> <p>Pls. add the related explanation, including a sketch map, into the revised PDD.</p>	B.7.1.16.	The description has been added. Please refer to the B.7.1.	<input checked="" type="checkbox"/>
<p><u>Clarification Request 9:</u> If the on-site audit is executed, the qualified testing institution has not been determined. If the request of registration could be decided before, pls. deliver the authorized certificate of the institution to DOE. Furthermore, pls. kindly put in the related testing regulations into the PDD, which includes but not limited to:</p> <ul style="list-style-type: none"> <li>- Monitoring frequency: at least every 6 months;</li> <li>- The sample shall be dry biomass;</li> <li>- Equipments used for testing (the accuracy and calibration process of these equipments);</li> <li>- QA/QC procedures.</li> </ul>	B.7.1.22.	The corresponding information has been added to the PDD.  Please refer to B.7.1	<input checked="" type="checkbox"/>

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**Table 3 Unresolved Corrective Action and Clarification Requests (in case of denials)**

Clarifications and / or corrective action requests by validation team	Id. of CAR/CR	Explanation of Conclusion for Denial
-	-	-

Validation of the CDM Project:


Straw generation project in Wei county Hebei province, P.R. China

P.R. China




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## **Annex 2: Information Reference List**

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Reference No.	Document or Type of Information
1	Project Design Document for CDM project “Straw Generating Project in Wei County Hebei Province, P. R. China“, dated on Nov. 28 <sup>th</sup> , 2006, version 1.0, submitted in Dec., 2006
2	Consolidated methodology for grid-connected electricity generation from biomass residues, version 04
3	Tool for the demonstration and assessment of additionality, version 03
4	Participant list of on-site interview, signed on Jan. 31 <sup>st</sup> , 2007
5	<div>Validation team:</div> <div><div>Sven KolmetzTÜV SÜD Industrie Service GmbH</div><div>Cuiyun ZhangJiangsu TUV Product Service Ltd.</div></div> <div>On-site interviews and inspection at the office conducted on Jan. 31<sup>st</sup>, 2007 by validators of TÜV SÜD.</div> <div>Interviewed persons:</div> <div><div>Mr. Xiao BinNational Bio Energy Co., Ltd.CDM Manager</div><div>Mr. Ren HongboNational Bio Energy Co., Ltd.Vice General Manager</div><div>Mr. Zhao ZhizhongNational Bio Energy Co., Ltd.Manager of Biomass Depatment</div><div>Ms. Ren LingsuNational Bio Energy Co., Ltd.Financial Manager</div><div>Mr. Fan RuiNational Bio Energy Co., Ltd.CDM Assistant</div><div>Mr. Li JianfeiNational Bio Energy Co., Ltd.Administration Manager</div><div>Mr. Hu FanEternal International Holoding Group Ltd. Consultant</div></div>
8	Feasibility report of Straw Generating Project in Wei County Hebei Province, dated in Mar., 2006, Hebei Electricity Research Institution, submitted on Jan. 31 <sup>st</sup> , 2007
9	Support letter for installation of biomass firing for electricity generation in Wei County, dated on May 15 <sup>th</sup> , 2006, Hubei Development and Reform Commission, submitted on Jan. 31 <sup>st</sup> , 2007
10	Approval of feasibility report of Straw Generating Project in Wei County Hebei Province, Hubei Development and Reform Commission, submitted on Jan. 31 <sup>st</sup> , 2007

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Reference No.	Document or Type of Information
12	Interim Rules on Economic Assessment of Electrical Engineering Retrofit Projects, State Power Corporation of China, submitted on Jan. 31 <sup>st</sup> , 2007
14	Purchasing contract of boiler, dated on Feb., 2006, National Bio Energy Co., Ltd. and Longji Power Co., Ltd., submitted on Jan. 31 <sup>st</sup> , 2007
15	Purchasing contract of turbine, dated in Mar., 2006, National Bio Energy Co., Ltd. and Qingdao Jieneng Turbine Co., Ltd., submitted on Jan. 31 <sup>st</sup> , 2007
16	Agreement of Electricity Distribution, dated on Dec. 25 <sup>th</sup> , 2006, Xingtai Power Company and National Bio Energy Co., Ltd., submitted on Jan. 31 <sup>st</sup> , 2007
18	Contracts of Bank Loan, China Minsheng Banking Group and National Bio Energy Co., Ltd., submitted on Jan. 31 <sup>st</sup> , 2007
19	Invoice of BWE boiler, dated on Nov. 3 <sup>rd</sup> , 2006, National Bio Energy Co., Ltd., submitted on Jan. 31 <sup>st</sup> , 2007
21	Carbon emission factor spreadsheet, China National Water Resources & Electric Power Materials & Equipment Co., Ltd., submitted on Dec. 26 <sup>th</sup> , 2006
22	China Electric Power Yearbook 2003-2005, submitted on Dec. 26 <sup>th</sup> , 2006
23	China Energy Statistical Yearbook 2000-2005, submitted on Dec. 26 <sup>th</sup> , 2006
24	IRR calculation spreadsheet, Global Climate Change Institute, Tsinghua University, submitted on Jan. 31 <sup>st</sup> , 2007
25	Training material of operation and maintenance provided by turbine manufacture, Suzlon Energy (Tianjing) Ltd., submitted on Dec. 26 <sup>th</sup> , 2006
26	EIA of Straw Generating Project in Wei County Hebei Province, dated in Mar., 2006, Hebei Zhonglian Energy Environmental Protection Co., Ltd., submitted on Jan. 31 <sup>st</sup> , 2007
27	Approval of EIA, date on Mar. 29 <sup>th</sup> , 2006, Hebei Environment Protection Bureau, submitted on Jan. 31 <sup>st</sup> , 2007
28	Project Design Document for CDM project "Straw Generating Project in Wei County Hebei Province, P. R. China", dated on Dec. 3 <sup>th</sup> , 2007, version 3.4
29	Purchasing contract of generator, dated on Feb. 28 <sup>th</sup> , 2006, National Bio Energy Co., Ltd. and Shandong Jinan Generator Co., Ltd., submitted on Jan. 31 <sup>st</sup> , 2007

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Reference No.	Document or Type of Information
30	Design document of boiler, dated in Feb., 2006, National Bio Energy Co., Ltd., submitted on Jan. 31 <sup>st</sup> , 2007
31	Qualification certificate of Water Pressure Testing, dated on Nov. 11, 2006, Xingtai Bureau of Quality and Technical Supervision, submitted on Jan. 31 <sup>st</sup> , 2007
32	Biomass source survey report with radius of 30/50km, National Bio Energy Co., Ltd., submitted on Jan. 31 <sup>st</sup> , 2007
33	Contracts of purchasing and transportation of cotton straw, National Bio Energy Co., Ltd., submitted on Jan. 31 <sup>st</sup> , 2007
34	Application of electricity tariff supplied to grid, National Bio Energy Co., Ltd., submitted on Jan. 31 <sup>st</sup> , 2007
35	National Renewable Law, effect on Jan. 1 <sup>st</sup> , 2006, submitted on Jan. 31 <sup>st</sup> , 2007
36	National VAT regulation, State Administration of Taxation, submitted on Jan. 31 <sup>st</sup> , 2007
37	Average electricity tariff of Hebei Grid, submitted on Jan. 31 <sup>st</sup> , 2007
38	Project Budget, dated in April, 2006, Hebei Electricity Research Institution, submitted on Jan. 31 <sup>st</sup> , 2007
39	Purchase Agreement of ERU from the Xunxian Straw Burning Power Plant Project between the buyer CCC and the project owner NBE, dated on Jan. 20 <sup>th</sup> , 2006
40	Deed of exclusivity between the buyer CCC and the project owner NBE, dated on 17.2.2006