



CDM Project Activity Registration and Validation Report Form

*(By submitting this form, designated operational entity confirms
that the proposed CDM project activity meets all validation and
registration requirements and thereby requests its registration)*

Section 1: Request for registration

Name of the designated operational entity (DOE) submitting this form	TÜV Industrie Service GmbH TÜV SÜD Group
Title of the proposed CDM project activity (Section A.2 of the attached CDM-PDD) submitted for registration	Bioenergia Cogeneratora
Project participants (Name(s))	Bioenergia Cogeneratora S.A.
Sector in which project activity falls	1 – Energy industries (renewable - / non-renewable sources)
Is the proposed project activity a small-scale activity?	Yes / <u>No</u> (underline as applicable)

Section 2: Validation report

List of documents to be attached to this validation report (please check mark):	
<p>The CDM-PDD of the project activity</p> <p>An explanation by the submitting designated operational entity of how it has taken due account of comments on validation requirements received, in accordance with the CDM modalities and procedures, from Parties, stakeholders and UNFCCC accredited non-governmental organizations;</p> <p>The written approval of voluntary participation from the designated national authority of each Party involved, including confirmation by the host Party that the project activity assists it in achieving sustainable development:</p> <p style="padding-left: 40px;">(Attach a list of all Parties involved and attach the approval (in alphabetical order))</p> <p style="padding-left: 40px;">Other documents, including any validation protocol used in the validation (comprehensive list of documents attached clearly referenced)</p> <p style="padding-left: 40px;">List of persons interviewed by DOE validation team during the validation process</p> <p style="padding-left: 40px;">Any other documents. Please specify.</p> <p>Information on when and how the above validation report is made publicly available.</p> <p>Banking information on the payment of the non-reimbursable registration fee</p> <p>A statement signed by all project participants stipulating the modalities of communicating with the Executive Board and the secretariat in particular with regard to instructions regarding allocations of CERs at issuance</p>	

Executive Summary and Introduction, including**Description of the proposed CDM project activity**

Scope of validation process (include all documentation that has been reviewed and name persons that have been interviewed as part of the validation, as applicable)

DOE Validation team (list of all persons involved in the validation, describing functions assumed in the validation)

“Bioenergia Cogeradora S.A” is a special purpose company set up to use residues from sugarcane milling in the city of Sertãozinho to generate electricity in a power plant using a high pressure boiler (63 bar) coupled with a new 24 MW generator. For the expected electric energy output (around 78,000 from 2002 on, assuming 90% capacity factor) there is a Power Purchase Agreement signed with the local power utility (CPFL, Companhia Paulista de Força e Luz).

A more efficient cogeneration of this renewable fuel allows Bioenergia to sell a surplus of electricity to the grid and creates a competitive advantage. The electricity sold to the grid diversifies income to the mill and it helps meet Brazil's rising demand for energy due to economic growth and to improve the supply of electricity, while contributing to the environmental, social and economic sustainability by increasing renewable energy's share of the total Brazilian (and the Latin America and the Caribbean region's) electricity consumption.

The validation scope is defined as an independent and objective review of the project design document, the project's baseline study and monitoring plan and other relevant documents. The information in these documents is reviewed against Kyoto Protocol requirements, UNFCCC rules and associated interpretations. TÜV SÜD has, based on the recommendations in the Validation and Verification Manual employed a risk-based approach in the validation, focusing on the identification of significant risks for project implementation and the generation of CERs.

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.

The audit team has been provided with a draft PDD in April 2005. Based on this documentation a document review and a fact finding mission in form of an on-site audit has taken place. That version was published in the global stakeholder process. After on-site validation and due to availability of more current data for grid calculations, the project developer submitted a final PDD version at the end of October 2005. That final version serves as a basis for the conclusive assessment being documented in this report. The changes after the global stakeholder process are not considered to be significant with respect to the qualification of the project as a CDM project based on the one main objectives of the CDM to achieve a reduction of anthropogenic GHG emissions by sources. Hence no repetition of the public stakeholder process has taken place.

Team:

Markus Knödlseider: After his professional training as chemical assistance Mr. Knödlseider studied environmental engineer at the University of Applied Science in Bingen, Germany. Beside his main focus in studies of environmental technologies, he dealt with environmental management and environmental controlling issues. He has been a staff at the department “Carbon Management Service” located in the head office of TÜV Industrie Service GmbH, TÜV SÜD Group in Munich since Oct. 2001. He has been involved in the topic of environmental auditing, baselining, monitoring and verification due to the requirements of the Kyoto Protocol with special focus on renewable energies. Mr. Knödlseider is also an auditor for environmental management systems (ISO 14.000). He interviewed the national Brazilian dispatcher Operação Nacional do Sistema (ONS) about

Mr. Wilson Tomao is lead auditor and former manager of TÜV Bayern Brazil. He is familiar with local laws and regulations and the assessment of technical installations. He assisted Mr. Betzenbichler during the on-site inspections and by evaluating documents submitting in Portuguese language. Meanwhile he can refer to the participation in the validation process of more than 15 CDM-projects in Brazil.

Further details are in validation report 609937, rev. 0

Description of methodology for carrying out validation

Review of CDM-PDD and additional documentation attached to it

Assessment against CDM requirements (e.g. by use of a validation protocol)

Report of findings by the DOE, e.g. by use of type of findings (e.g. corrective action requests, clarifications or observations). Please explain the way findings are "labelled" during validation.

Include statements or assessments in the section "Conclusions, final comments and validation opinion" below.

The project assessment aims at being a risk based approach and is based on the methodology developed in the Validation and Verification Manual (for further information see www.vvmanual.info), an initiative of all 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, according to the Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), means of verification 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 project design document submitted by the Client and additional background documents related to the project design and baseline were reviewed. A complete list of all documents reviewed is attached as annex 2 to this validation report 609937, rev.0

On May 23, 2005, TÜV SÜD performed interviews with project stakeholders to confirm selected information and to resolve issues identified in the first document review. Representatives of Bioenergie Cogedora S.A. in respective Usina Santo Antonio and UTE Usina São Francisco as well as representatives of the project developer Ecoinvest were interviewed.

In order to understand the Brazilian grid better representatives of the national dispatcher (Operação Nacional do Sistema) were interviewed, too.

Further details are in validation report 609937, rev. 0

Explanation by the submitting designated operational entity of how it has taken due account of comments on validation requirements received, in accordance with the CDM modalities and procedures, from Parties, stakeholders and UNFCCC accredited non-governmental organizations;

Description of how and when the PDD was made publicly available

Description of how comments were received and made publicly available

Explanation of how due account has been taken of comments received

Compilation of all comments received (Identify the submitter)

TÜV SÜD published the project documents on its website from May 4 to June 3, 2005 and invited comments within 30 days, by Parties, stakeholders and non-governmental organisations. One comment was received.

A comment has been submitted on 31. Mai 2005 by Axel Michaelowa, Programme International Climate Policy, Hamburg Institute of International Economics, Hamburg.

The comment has the following content:

„with an IRR of 18%, the case for additionality is not clear-cut. Given the strong incentive policies of

the Brazilian government after the electricity crisis of 2001, there are no prohibitive barriers for hydropower expansion in Brazil. The argumentation about barriers in the PDD is thus not convincing.

The comment has been submitted during the 30 days stakeholder period and is submitted by an accredited observer organisation. Hence the comment had to be considered in the validation process.

The audit team came to the following conclusion:

The demonstration of additionality in the PDD was assessed by the validation team. Investment barrier is part of demonstrating additionality. Taking into consideration the investment climate in Brazil, CDM is an important incentive for the decision to implement the project.

Conclusions, final comments and validation opinion

Provide conclusions on each requirement under paragraph 37 of the CDM modalities and procedures, describing how these requirements have been met. This shall include assessments and findings (e.g. corrective action requests, clarifications or observations) in relation to each requirement, including a confirmation that all issues raised have been addressed to the satisfaction of the DOE.

Final comments and validation opinion

TÜV SÜD has performed a validation of the Project Bioenergia S.A, Brazil. The validation was performed on the basis of UNFCCC criteria and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to Article 12 of the Kyoto Protocol, the CDM modalities and procedures and subsequent decisions by the CDM Executive Board.

In summary, it is TÜV SÜD's opinion that the project "Bioenergia Cogeneradora", as described in the revised project design document of October 2005, meets all relevant UNFCCC requirements for the CDM, set by the Kyoto Protocol, the Marrakech Accords and relevant guidance by the CDM Executive Board and that the project furthermore meets all relevant host country criteria and correctly applies the baseline and monitoring methodology AM0015

Hence, TÜV SÜD will recommend the EBCP for registration as CDM project activity by the CDM Executive Board.

Prior to the submission of this validation report to the CDM Executive Board, TÜV SÜD will have to receive the written approval of the DNA of involved parties, including confirmation by the DNA of Brazil that the project assists in achieving sustainable development.

By displacing fossil fuel-based electricity in principal with electricity generated from a renewable source, the project results in reductions of CO₂ emissions that are real, measurable and give long-term benefits to the mitigation of climate change. An analysis of the investment and technological barriers 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.

Additionally the assessment team reviewed the estimation of the projected emission reductions. We can confirm that the indicated amount of emission reductions of 151,655 CO_{2e} over a crediting period of seven years, resulting in a calculated annual average of 21,655 tonnes CO_{2e} represent a reasonable estimation using the assumptions given by the project documents.

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.

The DOE declares herewith that in undertaking the validation of this proposed CDM project activity it has no financial interest related to the proposed CDM project activity and that undertaking such a validation does not constitute a conflict of interest which is incompatible with the role of a DOE under the CDM.

By submitting this validation report, the DOE confirms that all validation requirements are met.

Name of authorized officer signing for the DOE

Markus Knödlseider

Date and signature for the DOE

04/11/2005

Section below to be filled by UNFCCC secretariat

Date when the form is received at UNFCCC secretariat

Date at which the registration fee has been received

Date at which registration shall be deemed final

Date of request for review, if applicable

Date and number of registration

Date

Number