

		CDM Project Activity Registration and Validation Report Form <i>(By submitting this form, designated operational entity confirms that the proposed CDM project activity meets all validation and registration requirements and thereby</i>	
Section 1: Request for registration			
Name of the designated operational entity (DOE) submitting this form		BVQI HOLDING S.A.	
Title of the proposed CDM project activity (Section A.2 of the attached CDM-PDD) submitted for registration		Rialma Companhia Energética S/A. – Santa Edwiges II Small Hydro Power Plant – Small Scale CDM Project.	
Project participants (Name(s))		Rialma Companhia Energética II S.A. Ecoinvest Carbon	
Sector in which project activity falls		Sectoral Scope: 1 – Energy industries (renewable - / non-renewable sources).	
Is the proposed project activity a small-scale activity?		Yes / No (<u>underline as applicable</u>)	
Section 2: Validation report			
List of documents to be attached to this validation report (please check mark):			
<ul style="list-style-type: none"> ⊕ The CDM-PDD of the project activity ⊕ 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; ❑ 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: <ul style="list-style-type: none"> ○ (Attach a list of all Parties involved and attach the approval (in alphabetical order)) ❑ Other documents, including any validation protocol used in the validation <ul style="list-style-type: none"> ⊕ (comprehensive list of documents attached clearly referenced) ⊕ List of persons interviewed by DOE validation team during the validation process ○ Any other documents. Please specify. ❑ Information on when and how the above validation report is made publicly available. ❑ Banking information on the payment of the non-reimbursable registration fee ❑ 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

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)**

- **Description of the proposed CDM project activity**

The primary objective of Santa Edwiges II Small Hydro Power Plant is to help 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.

Santa Edwiges II Small Hydro Power Plant consists of a run-of-river small-hydro power plant (~~12.1~~13 MW), that has a small reservoir (2.99 km²) with minor environmental impact.

The region where the small hydro power plant is located is at the end of a grid, The plant will contribute with an already existing grid , relieving it.

The project is located in the Midwest of Brazil. It is located in the Buritis River, between Mambai and Buritinópolis, state of Goiás, at the intersection of longitude 46°11'34,6" W and latitude 14°21' 20,4" S, about 300 Km from Brasília (Federal District).

- **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)**
 - **Scope of validation process**

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. BVQI has, based on the recommendations in the Validation and Verification Manual (IETA/PCF, v. 3.3, 2004), 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.

- **Documents reviewed**

A number of documents and records were reviewed during the validation process. The key documents are listed below

- Clean development mechanism – Project design document (CDM-PDD) – Rialma Companhia Energética S/A. – Santa Edwiges II Small Hydro Power Plant – Small Scale CDM Project, Version 2, Mar 2006
- [Clean development mechanism – Project design document \(CDM-PDD\) – Rialma Companhia Energética S/A. – Santa Edwiges II Small Hydro Power Plant – Small Scale CDM Project, Version 3, Jul 2006](#)
- Resolução Interministerial 01. Comissão Interministerial de Mudança Global do Clima, Sep, 2003.
- Resolução Interministerial 02. Comissão Interministerial de Mudança Global do Clima, Aug, 2005.
- Clean Development Mechanism Project Design Document Form (CDM-PDD) – Version 02
- Guidelines for completing CDM-PDD, CDM-NMB and CDM-NMM – Version 04
- Approved Consolidated Baseline Methodology ACM0006 “Consolidated baseline methodology for grid-connected electricity generation from biomass residues” - Version 01
- Tool for the demonstration and assessment of additionality – Version 02
- Kyoto Protocol to the United Nations Framework Convention on Climate Change. United Nations, Dec, 1997
- Clarifications on validation requirements to be checked by a Designated Operational Entity. UNFCCC/CCNUCC, Sep, 2004
- IETA/PCF – Validation and Verification Manual (v. 3.3, Mar 2004)
- ISO/ FDIS 14064-3 - Greenhouse gases — Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions
- ISO/ FDIS 14064-2 - Greenhouse gases — Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements

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

- **Persons interviewed**

USINA SANTA EDWIGES II

Emival Ramos Caiado Filho
Frederick Lins e Silva

ECOINVEST

Melissa Hirschheimer

- **DOE validation team**

Eng. Claudia Freitas
MSc Sergio Carvalho

BVQI Brazil GHG Auditor
BVQI Brazil Team Leader GHG Auditor

~~MSc. Flávio Gomes da Silva BVQI Holdings Internal Verifier~~

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 overall validation, from Contract Review to validation Report & Opinion was conducted using internal procedures (BVQI Management System – BMS-, September 2003), which were audited by the validation team in March 2006.

In order to ensure transparency, a validation protocol was customised for the project, according to the Validation and Verification Manual (IETA/PCF, r. 01, 2003). 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 validation of the project consists of the following 3 phases:

1. A desk review of the project design document and the baseline and monitoring plan
2. Follow-up interviews with the project participants
3. The resolution of outstanding issues and the issuance of the final validation report and opinion

The validation involved a combination of desk review and site visit to the project site. The desk review consisted of an assessment of PDD against the CDM and others applicable requirements and was followed by a site visit. The corrective and clarification requests were submitted to the client after completion of the site visit. The validation opinion and final report were issued subsequently.

- **Review of CDM-PDD and additional documents attached to it**

The PDD submitted by the client was reviewed against the CDM and other relevant requirements and the approved methodology. All other documents submitted to BVQI for detailed calculations of baseline determination were also reviewed.

- **Assessment against CDM requirements**

A validation protocol was developed to conduct the validation process. The protocol provides for a transparent mechanism and information on how the CDM and other relevant criteria and methodology requirements were assessed by the validation team.

- **Report of findings by the DOE**

The desk review and the site visit of the validation activity may result in corrective action requests (CAR) and/or clarification request (CR).

A corrective action request is issued where the project information does not conform to the CDM and other relevant requirement. A clarification request is made where the project information is not sufficiently describe and/or clarified.

The Corrective Action and Clarification Requests raised by BVQI were resolved during communications between the project participants, i.e. Rialma Companhia Energética S/A. – Santa Edwiges II Small Hydro Power Plant and Ecoinvest Carbon. . To guarantee the transparency of the validation process, the concerns raised and responses given are documented in more detail in the validation protocol.

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)

- Description of how and when the PDD was made publicly available

According to the modalities for the Validation of CDM projects, the validator shall make publicly available the project design document and receive, within 30 days, comments from Parties, stakeholders and UNFCCC accredited non-governmental organisations and make them publicly available.

BVQI published the project documents on the UNFCCC CDM website (<http://cdm.unfccc.int>) on 2006-02-18 and invited comments within 2006-03-19 by Parties, stakeholders and non-governmental organisations. No comments were received.

- Description of how comments were received and made publicly available

No comments were received.

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 meet. 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

BVQI has performed a validation of Project. (Rialma Companhia Energética S/A. – Santa Edwiges II Small Hydro Power Plant – Small Scale CDM Project) in 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.

The validation consisted of the following three phases: i) a desk review of the project design and the baseline and monitoring plan (March 2006); ii) follow-up interviews with project stakeholders (March 2006); iii) the resolution of outstanding issues and the issuance of the final validation report and opinion (March 2006); [iv\) revision of the validation report due to the comments of the Designated National Authority\(July 2006\)](#);

By displacing fossil fuel-based electricity with electricity generated from a renewable source, the project is likely to result in reductions of CO₂ emissions that are likely to be 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 and maintained as designed, the project is likely to achieve the estimated amount of emission reductions.

The review of the project design documentation (February 2006 version) and the subsequent follow-up interviews have provided BVQI with sufficient evidence to determine the fulfilment of stated criteria. In our opinion, the project correctly applies the simplified baseline and monitoring methodology AMS I.D and meets the relevant UNFCCC requirements for the CDM and the relevant host country criteria.

BVQI recommends the project for registration.

- **Will the project result in emissions reductions that are additional**

It is demonstrated that the project activity itself is not a likely baseline scenario due to the existence of investment, technological and other barriers due to prevailing practices. The project additionality has been demonstrated through presenting mainly investment barriers occurring both during construction and operation of the project.

The Project Scenario is considered additional in comparison to the baseline scenario, and therefore eligible to receive Certified Emissions Reductions (CERs) under the CDM, based on an analysis, presented by the PDD, of investment, technological and other barriers, and prevailing practice

The methodologies for calculating emission reductions are transparently documented and comply with existing good practice

For the estimation of emission reductions from electrical energy, a baseline emission factor is calculated as a combined margin of the operating and build margin emission factors. To determine these two factors, the project electricity system is defined by the spatial extent of the power plants that can be dispatched without significant transmission constraints. Similarly, the connected electricity system is defined as an electricity system that is connected by transmission lines to the project electricity system and in which power plants can be dispatched without significant transmission constraints.

- **Local stakeholder comments and actions taken**

Letters were sent to the following local stakeholders:

- City Hall of Buritinópolis and Mambáí;
- Chamber of Buritinópolis and Mambáí;
- Environmental agencies from the State and Local Authorities;

- Brazilian Forum of NGOs;
- District Attorney (known in Portuguese as Ministério Público, i.e. the permanent institution essential for legal functions responsible for defending the legal order, democracy and social/individual interests) and;

No comments were raised by this stakeholders.

- **Appropriateness assessment if applicable**

The project correctly applies the approved simplified baseline and monitoring methodology AMS-I.D. : Grid connected renewable electricity generation category Renewable electricity generation for a grid . It complies with all the conditions limiting the applicability of the methodology.

The Santa Edwiges II Small Hydro Power Plant project uses water from the Buritis River to generate electricity, with a ~~12.1~~ 13 MW installed capacity. SHPP Santa Edwiges II facility contains a small dam (reservoir area 2.99 km²), which stores water in order to generate electricity for short periods of time.

The technology and equipment used in the project were developed and manufactured locally and has been successfully applied to similar projects in Brazil and around the world

- **Are the provisions for monitoring, verification and reporting in accordance with decision 17/CP.7**

The authority and responsibility of project management and monitoring measurement are clearly described. Monitoring Plan incorporate all indicators of importance for controlling and reporting the project performance.

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

Sergio Carvalho

Date and signature for the DOE

May 22nd, 2006

July 20th, 2006



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