



**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	Det Norske Veritas Certification Ltd. (DNV)
Title of the proposed CDM project activity (Section A.2 of the attached CDM-PDD) submitted for registration	São João Landfill Gas to Energy Project (SJ)
Project participants (Name(s))	Biogás Energia Ambiental S/A and the Municipality of São Paulo
Sector in which project activity falls	Waste handling and disposal
Is the proposed project activity a small-scale activity?	No.

Section 2: Validation report

List of documents to be attached to this validation report (please check mark):	
<ul style="list-style-type: none"> <input checked="" type="checkbox"/> The CDM-PDD of the Project activity <input checked="" type="checkbox"/> 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 (Note: Included in DNV's Validation Report (DNV report 2005-0457, rev 01)); <input type="checkbox"/> 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"> o (Attach a list of all Parties involved and attach the approval(in alphabetic order)) <input checked="" type="checkbox"/> Other documents, including any validation protocol used in the validation. <ul style="list-style-type: none"> o DNV's Validation Report (DNV report 2005-0457, rev 01), including a validation protocol and a list of person interviewed by DNV validation team during the validation process. <input type="checkbox"/> Information on when and how the above validation report is made publicly available. <input type="checkbox"/> Banking information on the payment of the non-reimbursable registration fee. <input type="checkbox"/> 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 allocation 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)**

The São João Landfill Gas to Energy Project is a landfill gas collection and electricity generation project in Brazil. The project's core idea is to avoid methane emissions from the landfill managed by the São Paulo municipality in the São Paulo State and to displace grid electricity that is partly generated with fossil fuel, with electricity generated by combusting LFG.

The validation scope is an independent and objective review of the Project Design Document (PDD). The PDD was reviewed against Kyoto Protocol criteria for the CDM, the CDM rules and modalities as agreed in the Marrakech Accords and relevant decision by the CDM Executive Board. The validation team has, based on the recommendation in the IETA/PCF Validation and Verification Manual, employed a risk-based approach, focusing on the identification of significant risks for the project implementation and the generation of CERs.

The following documents were reviewed:

São João Landfill Gas to Energy Project (SJ) PDD. Version 1 (January 2005);
 São João Landfill Gas to Energy Project (SJ) PDD. Version 2 (August 2005);
 Spreadsheet of Calculation of Combined Margin (ONS database SSC 2001-2003 v.2005-06-22)
 International Emission Trading Association (IETA) & the World Bank's Prototype Carbon Fund (PCF): Validation and Verification Manual. <http://www.vvmanual.info>
 Approved Baseline and Monitoring Methodology ACM0001: "Consolidated baseline and monitoring methodology for landfill gas projects activities". Version 01 of 03 September 2004.
 Approved Baseline and Monitoring ACM0002: "Consolidated methodology for grid-connected electricity generation from renewable sources". Version 02 of 03 December 2004.
 EB: Tool for the demonstration and assessment of additionality, EB 16 Report, Annex 1.
 Bosi, M., A. Laurence, P. Maldonado, R. Schaeffer, A. F. Simoes, H. Winkler and J.-M. Lukamba. Road testing baselines for greenhouse gas mitigation projects in the electric power sector. OECD and IEA information paper, October 2002.

The following persons were interviewed:

Manoel Antonio Avelino Silva - Engineer of Logos Engineering
 Helvécio Guimarães – Consultant of Econergy

The validation team consisted of the following personnel:

Mr. Luis Filipe Tavares	DNV Rio de Janeiro	Team leader, Waste sector expert
Ms. Cintia Dias	DNV Rio de Janeiro	CDM auditor
Mr. Michael Lehmann	DNV Oslo	Energy sector expert, Technical reviewer

For further details, please refer to the "Introduction" and "References" Sections of DNV's Validation Report (DNV Report 2005-0457, rev. 01).

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 validation of the project started in December 2004. The Validation consists of the following three phases:

- a desk review of the Project design and the baseline and monitoring methodology;
- follow-up interview with Project stakeholders;
- the resolution of outstanding issues and the issuance of the preliminary validation report and opinion.

The original and revised versions of the project design document (PDD) for the project submitted by the project participants were reviewed. Additional background documents related to the project design and the baseline were also consulted.

On 01 April 2005 DNV performed interviews with Econergy and the shareholder Arcadis/Logos Engineering office in the São Paulo municipality, São Paulo State, to confirm and to resolve issues identified during the document review.

In order to ensure transparency, a validation protocol has been customized 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 validation the identified criteria.

Findings established during the validation can either be seen as a non- fulfilment of validation criteria or where a risk to the fulfilment of project objectives is identified. Such findings are termed Corrective Action Requests (CAR). The term Clarification may be used where additional information is needed to fully clarify an issue. The Corrective Action Requests and requests for Clarification raised by the validation team were resolved through communications with the project participants. To guarantee the transparency of the validation process, the concerns raised by DNV and the response provided by the project participants are documented in Table 3 of the Validation Protocol in Appendix A of DNV's Validation Report. (DNV report 2005-0457, rev 01).

For further details, please refer to the “Methodology” Section of DNV's Validation Report (DNV Report 2005-0457, rev. 01) and the IETA/PCF Validation and Verification Manual (www.vvmanual.info)

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)**

DNV Certification published the PDD of January 2005 on the DNV Climate Change web site (<http://www.dnv.com/certification/ClimateChange>) and stakeholders were through the UNFCCC CDM web site invited to provide comments within a 30 days period from 17 February 2005 to 19 March 2005. Two comments were received and they are published on the DNV Climate Change website.

Please refer to the “Comments by Parties, stakeholders and NGOs” Section of DNV's Validation Report (DNV Report 2005-0457, rev. 01) for how DNV has taken due account of the comments 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 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**

Det Norske Veritas Certification Ltd. (DNV) has performed a validation of the “São João Landfill Gas to Energy Project (SJ)” at São Paulo Municipality; São Paulo State, Brazil, (hereafter called “the project”). The validation was performed on the basis of UNFCCC criteria for CDM project activities and relevant Brazilian criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The project participant are Biogás Energia Ambiental S/A and São Paulo Municipality. The participating host Party Brazil meets the requirements to participate in the CDM. No Annex I Party has yet been identified.

The project plans to install a LFG collection and treatment system to increase the LFG collection efficiency to 80% and aims to utilize the collected LFG to generate electricity by installing gas engines with a total capacity of 20 MW. The project is not expected to have considerable environmental impacts. An Environmental Impact Study as required by Brazilian law has been carried out and the project has received the environmental licences by CETESB.

By promoting renewable energy, the project is in line with the current sustainable development priorities of Brazil.

The project applies the approved baseline and monitoring methodology ACM0001, i.e. “Consolidated baseline and monitoring methodology for landfill gas projects activities” for the capture and destruction of methane contained in landfill gas. For determining emission reductions from the displacement of grid electricity the project applies ACM0002, i.e. “Consolidated methodology for grid-connected electricity generation from renewable sources”. The baseline methodologies have been applied correctly and the assumptions made for the selected baseline scenario are sound. It is sufficiently demonstrated that the project is not a likely baseline scenario and that emission reductions attributable to the project are additional to any that would occur in the absence of the project activity.

A combined margin emission coefficient of 0.249 tCO₂e/MWh (weighted average of the build and operating margin) is calculated in accordance with the baseline methodology ACM0002. The determination of this combined margin emission coefficient is based on actual electricity generation data provided by the National Electricity System Operator (ONS) for the years 2001- 2003 in the South-Southeast-Midwest grid.

The monitoring plan sufficiently specifies the monitoring requirements of the main project indicators.

By burning of methane of landfill gas and by displacing fossil fuel-based electricity, the project results in reductions of CH₄ and CO₂ emissions that are real, measurable and give long-term benefits to the mitigation of climate change. Given that the project is operated as designed, the project is likely to achieve the estimated amount of emission reductions.

Local stakeholder comments were invited according to the Brazilian DNA Resolution 1 and Parties, stakeholders and NGOs were invited to comment on the validation requirements. The comments received have been taken into account.

In summary, it is DNV's opinion that the "São João Landfill Gas to Energy Project (SJ)" as described in the revised and resubmitted project design document of August 2005, meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria and correctly applies the baseline and monitoring methodology for ACM0001 in combination with ACM0002. Hence, DNV will request the registration of the "São João Landfill Gas to Energy Project (SJ)" as CDM project activity.

For further details, please refer to the "Validation Findings" Section and Table 1 of the Validation Protocol in Appendix A of DNV's Validation Report (DNV Report 2005-0457, rev. 01).

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.

Prior to the submission of this validation report to the CDM Executive Board, DNV will have to receive the written approval of voluntary participation from the Brazilian DNA.

Name of authorized officer signing for the DOE

Michael Lehmann
Michael Lehmann

Date and signature for the DOE

22 August 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