



**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**

<b>Name of the designated operational entity (DOE) submitting this form</b>	Det Norske Veritas Certification Ltd. (DNV)
<b>Title of the proposed CDM project activity (Section A.2 of the attached CDM-PDD) submitted for registration</b>	Lages Methane Avoidance Project
<b>Project participants (Name(s))</b>	Lages Bioenergética Ltda (Brazil).
<b>Sector in which project activity falls</b>	Waste handling and disposal Agriculture
<b>Is the proposed project activity a small-scale activity?</b>	Yes

**Section 2: Validation report**

<b>List of documents to be attached to this validation report (please check mark):</b>	
<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The CDM-PDD of the Project activity</li> <li><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 2005-0935, rev 02));</li> <li><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"> <li>o (Attach a list of all Parties involved and attach the approval(in alphabetic order))</li> </ul> </li> <li><input checked="" type="checkbox"/> Other documents, including any validation protocol used in the validation. <ul style="list-style-type: none"> <li>o DNV's Validation Report (DNV report 2005-0935, rev 02), including a validation protocol and a list of person interviewed by DNV during the validation process.</li> </ul> </li> <li><input type="checkbox"/> Information on when and how the above validation report is made publicly available.</li> <li><input type="checkbox"/> Banking information on the payment of the non-reimbursable registration fee.</li> <li><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.</li> </ul>	

### **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 objective of this proposed small-scale CDM project activity is to avoid methane emissions from anaerobic decay of wood waste in stockpiles (biomass decay) through controlled combustion of wood waste in a cogeneration process, which simultaneously generates electricity, which is supplied to the local distribution company, and thermal energy which is supplied to industrial clients in the vicinity of the projects. Only CERs for the avoidance of methane emissions are claimed.

Emission reductions are generated by burning of biomass that would otherwise have been left to decay. Hence, the project involves methane avoidance from biomass not being landfilled. During the ten-year crediting period starting 01 November 2004, the project's expected annual emission reductions are 2 204 394 tCO<sub>2</sub>e. The annual emission reductions of the proposed project activity is estimated as 220 439 tCO<sub>2</sub>e.

The validation scope is defined as an independent and objective review of the project design document (PDD). The PDD is reviewed against the criteria stated in Article 12 of the Kyoto Protocol, the CDM modalities and procedures as agreed in the Marrakech Accords, the simplified modalities and procedures for small-scale CDM project activities and the relevant decisions 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:

Lages Bioenergética Project, PDD of the Lages Project, August 2005  
 Lages Bioenergética Project, PDD of the Lages Project, September 2005  
 Lages Bioenergética Project, Monitoring document, September 2005  
 Lages Bioenergética Project, Spreadsheet of Emission Calculations, September 2005  
 IPCC: Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories. 2000  
 International Emission Trading Association (IETA) & the World Bank's Prototype Carbon Fund (PCF): Validation and Verification Manual. <http://www.vvmanual.info>  
 Appendix B of the simplified modalities and procedures for small-scale CDM project activities: Indicative simplified baseline and monitoring methodologies for selected small-scale CDM project activity categories (Version 05 of 25 February 2005).

The following persons were interviewed:

Marcio Daian Neves - Operational Manager of Lages.  
 Jorge Ivanov Hristo - Commercial Director of the Supplier Sofia.  
 Rogério Franzoi - Supervisor of the production process of Battistella.  
 Gabriel Mann – Business Development of Tractebel  
 Luiz Carlos Luckner – Director of one of spot supplier Multiform

The validation team consist of the following personnel:

Cintia Dias	DNV Oslo	Team Leader, GHG auditor
Luis Filipe Tavares	DNV Brazil	CDM auditor
Michael Lehmann	DNV Oslo	Energy sector expert, Technical reviewer

For further details, please refer to the "Introduction" Section of DNV's Validation Report (DNV report 2005-0935, rev 02).

#### 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 consisted of the following three phases:

- a desk review of the Project design documents
- follow-up interview with project stakeholders;
- the resolution of outstanding issues and the issuance of a validation report and opinion.

The original and revised versions of the 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 14 and 15 September 2005 DNV performed interviews with Lages Bioenergética, Sofia, Battistella and Multiform at Lages Bioenergética, Santa Catarina State, to confirm and to resolve issues identified in 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 the requests for Clarification raised by the validation team were resolved through communications with the project participants. To guarantee the transparency of validation process, the concerns raised by DNV and the response provided by the project participants is documented in Table 3 of the Validation Protocol in Appendix A of DNV's Validation Report (DNV report 2005-0935, rev 02).

For further details, please refer to the "Methodology" Section of DNV's Validation Report (DNV report 2005-0935, rev 02) and the IETA/PCF Validation and Verification Manual ([www.vvmanual.info](http://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)**

The PDD of August was made publicly available on DNV's climate change website ([www.dnv.com/certification/climatechange](http://www.dnv.com/certification/climatechange)) and Parties, stakeholders and NGOs were through the CDM website invited to provide comments during a 30 days period from 26 July 2005 to 24 August 2005.

Two positive comments were received one on 29 July 2005 and other on 30 July 2005. The comment (in unedited form) and how DNV has taken due account of the comment received is given in the "Comments by Parties, stakeholders and NGOs" Section of DNV's Validation Report (DNV report 2005-0935, rev 02).

**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 "Lages Methane Avoidance Project" in Brazil. The validation was performed on the basis of UNFCCC criteria for the Clean Development Mechanism and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The review of the project design documentation and the subsequent follow-up interviews have provided DNV with sufficient evidence to determine the fulfilment of stated criteria.

Being a project activity having less than 15 000 tCO<sub>2</sub>e project emissions, the project meets the criteria for Methane avoidance (Type III.E) as defined in Appendix B of the simplified modalities and procedures for small-scale CDM project activities.

The simplified modalities and procedures give no further guidance on which project emissions to include for determining whether a project meets the small-scale eligibility threshold for category III.E, i.e. the project emissions shall be less than 15 000 tCO<sub>2</sub>e per year. The selected definition of the project emissions being the CH<sub>4</sub> and N<sub>2</sub>O emissions due to incomplete combustion of biomass with an exclusion of biogenic CO<sub>2</sub> emissions from the combustion of biomass is in line with other approved CDM baseline and monitoring methodologies.

The baseline is established according to the simplified baseline methodology for category III.E small-scale CDM project activities. The amount of methane produced from decay of biomass landfilled in absence of the project is determined using adequate IPCC default emission factors.

An analysis of relevant barriers demonstrates that the proposed project is not a likely baseline scenario and emission reductions are hence additional to any that would occur in its absence of this proposed CDM project activity.

By avoiding landfilling of biomass, the project results in reductions of CO<sub>2</sub> emissions and the avoidance of CH<sub>4</sub> emissions that are real, measurable and give long-term benefits to the mitigation of climate change. Given that the project is implemented as designed, the project is likely to achieve the estimated amount of emission reductions.

The project applies the simplified monitoring methodology described for category III.E small-scale CDM project activities. Detailed responsibilities and authorities for project management, monitoring procedures and QA/QC procedures have been presented during interviews with Lages. The monitoring plan is established as a corporate policy.

A consultation process with relevant local stakeholders has been conducted and no comments were received during the consultation process.

Parties, stakeholders and NGOs were invited to provide comments and all issues raised by stakeholders were taken into account during the validation.

In summary, it is DNV's opinion that the "Lages Methane Avoidance Project", as described in the revised and resubmitted project design document of September 2005, meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria and correctly applies the simplified baseline and monitoring methodologies for category III.E small-scale CDM project activities. Hence, DNV requests the registration of the "Lages Methane Avoidance Project" 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 2005-0935, rev 02).

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 the DNA of Brazil, including confirmation that the project assists in achieving sustainable development.

Name of authorized officer signing for the DOE

*Michael Lehmann*

Michael Lehmann

Date and signature for the DOE

26 September 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

