



### 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	Paramonga CDM Bagasse Boiler Project
Project participants (Name(s))	Agro Industrial Paramonga S.A.A. (AIPSA)
Sector in which project activity falls	Energy industries (renewable - / non-renewable sources)
Is the proposed project activity a small-scale activity?	<u>Yes</u> (underline as applicable)

#### Section 2: Validation report

List of documents to be attached to this validation report (please check mark):	
<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 (<b>Note: Included in DNV's Validation Report (Report No. 2005-0463, version 01)</b>);</li> <li><input checked="" 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 Peru (Letter of Approval of 28 January 2005)</li> </ul> </li> <li><input checked="" type="checkbox"/> Other documents, including any validation protocol used in the validation (<b>Note: Validation protocol is included in DNV's Validation Report (Report No. 2005-0463, version 01)</b>)</li> <li><input checked="" type="checkbox"/> Information on when and how the above validation report is made publicly available.</li> <li><input checked="" type="checkbox"/> Banking information on the payment of the non-reimbursable registration fee</li> <li><input checked="" 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 allocations 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 main objective of the Paramonga CDM Bagasse Boiler project is to change the energy generation system of AIPSA from the current residual fuel oil based energy generation system to a new sugar cane bagasse based energy system. The project will substitute two boilers which consume primarily residual fuel oil, complemented by residual pith and bagasse; with one new boiler that uses only bagasse and pith. AIPSA, the project proponent, is a large sugar company in Peru, producing approximately 110 thousand metric tonnes of sugar annually. AIPSA is situated approximately 200 kilometres north of Lima.

The project is estimated to reduce greenhouse gas emissions by 85 300 tonnes CO<sub>2</sub>e per year on the average by displacing fossil fuel (Residual fuel oil) with renewable fuel (Bagasse).

The validation scope was 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 decisions by the CDM Executive Board. The validation team has, based on the recommendations in the IETA/PCF Validation and Verification Manual, employed a risk-based approach, focusing on the identification of significant risks for project implementation and the generation of CERs.

The following documents were reviewed:

- AIPSA: Paramonga CDM Bagasse Boiler Project. Project Design Document of 18 November 2004 and resubmitted to DNV on 29 April 2005.
- Host country approval letter: Letter Nr. 195-2005-CONAM-SE, dated 28 January 2005.
- International Emission Trading Association (IETA) & the World Bank's Prototype Carbon Fund (PCF): Validation and Verification Manual, at [www.vvmanual.info](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: 25 February 2005).

8-11 March 2005, DNV performed interviews with project stakeholders. The following persons were interviewed:

- Mr Edgardo Wong, Director and owner of AIPSA
- Hugo Ayon, Financial Director/Director of CDM AIPSA Project
- Freddy Sarmiento, General Manager - AIPSA Plant
- Mrs Samantha Ellegren, Head of Social Department AIPSA
- Governor and mayor of Paramonga City
- Local inhabitants/community of Paramonga City (DNV attended a meeting with local stakeholders on 9 March 2005)
- Thomas Black & Javier Blanco - CAEMA
- Mrs. Julia Justo - CONAM

The validation team consisted of the following personnel:

- Ms Mari Grooss Viddal, DNV Oslo, Team Leader, GHG auditor
- Mr Edgardo Devoto, DNV Buenos Aires, GHG auditor
- Mr Ramesh Ramachandran, DNV Chennai, GHG auditor
- Mr Michael Lehmann, DNV Oslo, Energy sector expert

For further details, please refer to the "Introduction" and "References" Sections of DNV's Validation Report (Report No. 2005-0463, version 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 February 2005 and was concluded in April 2005. The validation consisted of the following three phases:

- I a desk review of the project design documents (February to March 2005)
- II follow-up interviews with project stakeholders (8-11 March 2005)
- III the resolution of outstanding issues and the issuance of the final validation report and opinion (March to April 2005).

In order to ensure transparency, a validation protocol has been customised for the project, according to the IETA/PCF Validation and Verification Manual. The protocol shows, in a transparent manner, criteria (requirements), means of verification and the results from validating 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.

For further details, please refer to the "Methodology" Section of DNV's Validation Report (Report No. 2005-0463, version 01) 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 has been published 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 UNFCCC CDM website invited to provide comments on the validation requirement during a period of 30 days from 13 February to 15 March 2005. 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 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 Paramonga CDM Bagasse Boiler Project in Peru (hereafter called "the project"). The validation was performed on the basis of UNFCCC criteria for small-scale CDM project activities and relevant Peruvian criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The proposed bagasse boiler project will have an installed capacity of 13.6 MW<sub>thermal</sub> and the project will generate thermal energy for the AIPSA sugar processing plant. The project design is sound and the project is not expected to have considerable environmental impacts.

The only project participant is Agro Industrial Paramonga S.A.A. (AIPSA) of Peru. The host Party, Peru, meets all relevant participation requirements. There is currently no Annex I Party participating in the project. The DNA of Peru approved the project and confirmed the project's contribution to the sustainable development of Peru.

Being a renewable energy project activity with an output capacity of less than 45 MW<sub>thermal</sub>, the project is eligible as "Renewable Energy Project: Thermal energy for the user" (Type I.C) small-scale CDM project activity as defined in Appendix B of the simplified modalities and procedures for small-scale CDM project activities. The project baseline is the fuel consumption of the technologies that would have been used in the absence of the project activity times an emission coefficient for the fossil fuel displaced. The project displaces Residual fuel oil and IPCC emission coefficients for Residual fuel oil are used. The baseline methodology has been applied correctly and the calculations have been verified.

The project faces investment barriers and barriers due to prevailing practice. The existence of these barriers has been demonstrated by a Net Present Value analysis of the project and baseline demonstrating that the latter is the preferred option in the absence of CER revenues and by demonstrating that the existing contractual arrangement with the adjacent paper company, QUIMPAC is likely to be the preferred alternative during the course of the crediting period in absence of the CDM. The existence of these barriers has been confirmed during interviews with AIPSA.

By displacing Residual fuel oil-based steam and electricity, the project results in reductions of CO<sub>2</sub>e 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 stated estimated amount of emission reductions.

The monitoring plan sufficiently specifies the monitoring requirements of the main project indicators. Detailed responsibilities and authorities for project management, procedures for monitoring and reporting, and QA/QC procedures are described and allow for consistent subsequent verifications of emission reductions.

In summary, it is DNV's opinion that the Paramonga CDM Bagasse Boiler Project, as described in the project design document submitted to DNV on 29 April 2005, meets all relevant UNFCCC requirements for the CDM and all relevant host country criteria and correctly applies the simplified baseline and monitoring methodology for type I.C small-scale CDM project activities. Hence, DNV requests the registration of the Paramonga CDM Bagasse Boiler Project as a CDM project.

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 Mari Grooss Viddal

Date and signature for the DOE

24 May 2005

*Mari Grooss Viddal*

**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