



**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	Angkor Bio Cogen Rice Husk Power Project
Project participants (Name(s))	Angkor Bio Cogen Co., Ltd.
Sector in which project activity falls	Sectoral scope 1: Energy industries (renewable - / non-renewable sources) Sectoral scope 13: Waste handling and disposal Sectoral scope 15: Agriculture
Is the proposed project activity a small-scale activity?	<u>Yes</u> / No (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"> <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 No. 2006-0559, rev. 01a)) <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"> ○ DNA of the Kingdom of Cambodia: Letter of Approval, 19 January 2006 <input checked="" type="checkbox"/> Other documents, including any validation protocol used in the validation <ul style="list-style-type: none"> ○ DNV's Validation Report (DNV Report No. 2006-0559, rev. 01a), including a validation protocol and a list of persons interviewed by DNV during the validation process and including an explanation of how DNV has taken due account of comments on validation requirements received. <input checked="" type="checkbox"/> Information on when and how the above validation report is made publicly available. <input checked="" type="checkbox"/> Banking information on the payment of the non-reimbursable registration fee <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. 	

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 purpose of the project activity is to generate electricity utilizing rice husk by-product produced by rice mill as fuel. Angkor Bio Cogen Co., Ltd. (ABC), a special purpose company for the rice husk power generation project will construct a power plant with a generation capacity of 2.0 MW in Phum Ang Snoul, Ang Snoul District, Kandal in Cambodia. The generated electricity will be sold to the adjacent rice mill owned and operated by Angkor Kasekam Roongroeng Co., Ltd. (ARM) which supplies the rice husk to ABC and to the neighbouring factory via ARM.

ARM and ABC are exploring a possibility of providing a small volume of the electricity to the Ang Snoul Village, which is not currently electrified. However, this activity is not included in the small-scale CDM project proposed by the PDD. Approximately 10% of the steam generated by the rice husk fired boiler will be consumed for drying rice paddy. However, this is also not included in the small-scale CDM project.

ABC will claim the credit of 51 620 tCO₂e annually between 2007-2014 (7 years) by avoiding CH₄ generation/emission by means of combustion of waste instead of piling this to decay, and by displacing electricity currently generated by diesel oil. The project proponent intends to seek approval for 2 subsequent crediting periods as applicable.

The validation scope is an independent and objective review of the Project Design Document (PDD). The PDD was reviewed against the criteria stated in Article 12 of the Kyoto Protocol criteria for the CDM, the CDM modalities and procedures 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, and 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:

SSC-PDD, Angkor Bio Cogen Rice Husk Power Project in Cambodia, 16 February 2005

SSC-PDD, Angkor Bio Cogen Rice Husk Power Project in Cambodia, 12 April 2005

SSC-PDD, Angkor Bio Cogen Rice Husk Power Project in Cambodia, 27 March 2006

SSC-PDD, Angkor Bio Cogen Rice Husk Power Project in Cambodia, 31 July 2006

List of comments and actions

Host country approval letter, 19 January 2006 (The Kingdom of Cambodia)

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 07: 28 November 2005.

The following persons were interviewed:

Masachika Suzuki, Analyst, Clean Energy Finance Committee, Mitsubishi Securities Co., Ltd.

Kikuko Okada, Analyst, Clean Energy Finance Committee, Mitsubishi Securities Co., Ltd.

Adisorn Chieu, Managing Director, Angkor Bio Cogen Co., Ltd. (ABC)

Thy Sum, Manager, Chief of Climate Change Office, Department of Planning and Legal Affairs, Ministry of Environment

Tin Ponlok, Ph.D., Deputy Director, Department of Planning and Legal Affairs, Ministry of Environment

Thanakvara De Lopez, Ph.D., Senior Researcher, The Cambodian Research Centre for Development

Toch Sovana, head of Renewable Energy Office, Department of Energy Technique, Ministry of Industry Mines and Energy (MIME)

The validation team consisted of the following personnel:

Mr. Akira Sekine	DNV Certification Japan	Team Leader, GHG Auditor
Mr. Thivakaran Narayanan	DNV Certification Malaysia	GHG Auditor
Mr. Einar Telnes	DNV Certification Norway	Technical Verifier

For further details, please refer to the “Introduction” and “References” Sections of DNV’s Validation Report (DNV Report No. 2006-0559, rev. 01a).

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:

- i) a desk review of the project design, baseline and monitoring plan
- ii) follow-up interview with project stakeholders
- iii) the resolution of outstanding issues and the issuance of the validation report and opinion

The original and revised versions of the project design document (PDD) of the project were assessed. Additional background documents related to the project design and the baseline were also consulted.

In the period of 02-03 February 2005, a member of the validation team from DNV performed interviews with project stakeholders in Cambodia to confirm selected information and to resolve issues identified in the document review. Representatives of Mitsubishi UFJ Securities were also interviewed.

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 of 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 DNV were resolved through communication 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 No. 2005-1193, rev. 01).

For further details, please refer to the “Methodology” Section of DNV’s Validation Report (DNV Report No. 2006-0559, rev. 01a) 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)

The PDD of 12 April 2005 was made publicly available on DNV's climate change website (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 15 June 2005 to 14 July 2005.

One comment was received on 1 July 2005. The comment received and how DNV has taken due account of the comment received is documented in the "Comments by Parties, Stakeholders and NGOs" Section of DNV's Validation Report (DNV Report No. 2006-0559, rev. 01a).

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 "Angkor Bio Cogen Rice Husk Power Project" in Cambodia. The validation was performed on the basis of UNFCCC criteria for small-scale CDM project activities and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting. UNFCCC criteria refer to the Kyoto Protocol criteria and the small-scale CDM rules and modalities and the subsequent decisions by the CDM Executive Board.

The project activities consist of the construction of a rice husk firing CHP in order to generate electric power and steam to be consumed by the adjacent rice mill.

By burning the rice husk by-produced at the rice mill, the project results in reduction of CH₄ generation/emission from decayed rice husk. Besides, by displacing high carbon emission factor electricity currently consumed at the rice mill with electricity generated from a renewable source, the project results in reductions of CO₂ emissions. Those are real, measurable and give long-term benefits to the mitigation of climate change.

The project participant is Angkor Bio Cogen Rice Husk Power Co., Ltd. The project has been approved by the DNA of Cambodia on 19 January 2006. Project participants of Annex I Parties are not yet identified.

The indicative simplified baseline and monitoring methodologies, AMS Type I.A. and III E are appropriately applied. For diesel generation displacement, IPCC default value of 0.9 kg-CO₂e /kWh as defined by the methodology Type I.A. is used.

An analysis of the "technological barrier" and the "barrier due to prevailing practice" 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.

Accuracy and correctness of the energy content data of biomass used for estimating the ex-ante project emission are properly addressed.

The validation team has received a confirmation by the host Party that the project activity assists it in achieving sustainable development.

The PDD was made publicly available on the DNV Climate Change website for comments by Parties, stakeholders and UNFCCC accredited NGOs from 15 June 2005 to 14 July 2005. One comment was received and the PDD was corrected and/or revised addressing the comments properly.

The local stakeholder consultation process was conducted and documented in the PDD according to the relevant authorities of the host Party. All comments received were positive and supportive to the project.

In summary, it is DNV's opinion that the "Angkor Bio Cogen Rice Husk Power Project" meets all relevant UNFCCC requirements for the small-scale CDM and all relevant host country criteria. Hence, DNV requests the registration of the project as a small-scale CDM project.

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 No. 2006-0559, rev. 01a).

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 Michael Lehmann

Date and signature for the DOE

4 August 2006

Michael Lehmann

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