



### 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>	Korea Energy Management Corporation
<b>Title of the proposed CDM project activity (Section A.2 of the attached CDM-PDD) submitted for registration</b>	Gangwon Wind Park Project
<b>Project participants (Name(s))</b>	Unison Co., Ltd. Gangwon Wind Power Co., Ltd. Ecoeye Co., Ltd. Marubeni Corporation Eurus Energy Japan Corporation
<b>Sector in which project activity falls</b>	1. Energy industries (renewable energy sources)
<b>Is the proposed project activity a small-scale activity?</b>	Yes / <u>No</u>

#### 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: refer to the KEMCO Validation Report attached, section 7.)</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><input type="checkbox"/> Letter of Approval by the DNA of Japan</li> <li><input type="checkbox"/> Letter of Approval by the DNA of Korea</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><input type="checkbox"/> KEMCO Validation Report (No. TA201-200501, rev. 03) including the list of persons interviewed by DOE validation team during the validation process</li> </ul> </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 Gangwon Wind Park Project is the first large-scale wind power project with a total capacity of 98MW in Korea. A total of 49 wind turbine generators will be installed in stages, each of which has an asynchronous generator with a rated power of 2MW and operates with variable speed to fit the various local wind conditions. At the first stage, 28MW of the total capacity will be installed and the whole project is expected to start operation in 2007. Given that the annual wind speeds at the site are in the range of 7.65m/s at 60m above ground, the project is estimated to generate 244,400MWh per year reducing 149,536 metric tons CO<sub>2</sub>eq which would otherwise occur.

In order to assess the CDM project design document (PDD) of the project, KEMCO first prepared validation checklist questions according to each sub-sections of the PDD form. Then, the validation team was formed such that the assessment covered various aspects of the project including its technological aspects, business-as-usual scenario, monitoring of emission reductions and environmental impacts. More importantly, in order to ensure the consistency of judgment while performing validation the validation team applied the following principles as a basis of judgment throughout the validation: completeness; consistency; accuracy; transparency; relevancy; and conservativeness. The major means of assessment included document review, cross-check between documents and data, and interview.

Key documents that had been reviewed during the validation process are as follows

- Unison, Gangwon Wind Park Project, Project Design Document, Updated in August 2005
- Unison, Financial Analysis Excel Files, Updated in August 2005
- Gangwon Wind Power, 2nd Phase Preliminary Environmental Review Report, October 2003
- PB Power, Gangwon Wind Farm Project – Wind Resource Assessment, April 2005
- Korea NGO's Energy Network, Proceedings of Forum – Environmental Impact and Feasibility Study of the Wind Park in the Baekdudaegan Mountains, 2002
- Korea Electric Power Corporation, Statistics of Electric Power in Korea, 2002~2004
- Ministry of Commerce, Industry and Energy, Statistics of Renewable Energy in Korea, 2004
- Ministry of Commerce, Industry and Energy, 2nd Basic National Plan for Electricity Supply, 2004
- Korea Electric Power Corporation, 5th Long-term Power Development Plan, (1999~2015), 2000
- Korea Power Exchange, Current Status of Generating Capacity in Korea, 2004
- Korea Power Exchange, Electricity Market Operation Regulation, 2005

The persons interviewed at the on-site assessment are as below:

- Young-Seo Ko, Project Manager, Unison Co., Ltd;
- Roland Ries, Project Manager, Lahmeyer International;
- Jung-Chul Chun, Representative, Association for Protection of Baekdudaegan Mountains; and
- Seong-Taeg Yu, Assistant Director, Economic Policy Division, Gangwon Provincial Government.

The validation team was formed as below:

- Han, Seung Ho, KEMCO, Validator, Team Leader
- Kim, Young Tae, KEMCO, Lead Validator
- Kim, Geon Hoon, Korea Institute of Energy Research, Technical Expert
- Lee, Chul Woo, KEMCO, Lead Validator, Performance Evaluator

#### **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 process for the Gangwon Wind Park Project was implemented in three stages, i.e. desk review (20 May 2005~27 May 2005), on-site assessment (15 June 2005~30 June 2005) and review of corrective actions (22 Aug. 2005~9 Sep. 2005).

The desk review was made during the period from 20 May to 27 May mostly by reviewing documents submitted by the project participants such as the Project Design Document and supporting documentation considering their completeness, consistency, accuracy, transparency, relevance, and conservativeness. The validation criteria, against which the project documentation is assessed, include CDM modalities and procedures required by the Marrakech Accords and relevant CDM EB decisions, which are specified in the Validation Checklist. The desk review focused mainly on the three aspects below:

- Demonstration of the project additionality;
- Calculation of baseline and project emissions; and
- Coverage of significant factors in the monitoring plan.

The on-site assessment was made during the period from 15 June to 30 June by making on-site visits and interviewing relevant persons particularly for the purpose of checking the remaining issues identified at the desk review. The assessment focused mainly on the four aspects below:

- What technologies will be transferred through the project;
- Whether the project contributes to sustainable development of the local areas;
- What is missing in the monitoring plan; and
- Whether due consideration has been taken of local stakeholders' comments.

As a result of the on-site assessment, the validation team requests the project proponents to take corrective actions against nine non-conformities i.e. two Major non-conformities and seven Minor non-conformities identified within the deadline, as agreed in the Validation Contract.

In response to the request for corrective actions against non-conformities identified, the project proponents submitted the revised project documentation to the validation team, of which the validation team made a thorough review during the period from 22 August to 9 September. Then the team fully agreed that all the significant non-conformities issued had been cleared.

**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)**

In accordance with Paragraph 40(c) of the CDM Modalities and Procedures, the project design document of Gangwon Wind Park Project had been posted on the UNFCCC CDM website for public comments from 13 June 2005 to 12 July 2005. **As a result, no comments were received during that period.**

#### **Conclusions, final comments and validation opinion**

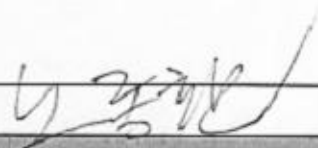
- **Provide conclusions on each requirement under paragraph 37 of the CDM modalities and procedures, describing how these requirements have been met. This shall include assessments and findings (e.g. corrective action requests, clarifications or observations) in relation to each requirement, including a confirmation that all issues raised have been addressed to the satisfaction of the DOE.**
- **Final comments and validation opinion**

The KEMCO validation team has performed a validation of Gangwon Wind Park Project which claimed approximately 149,536 CO<sub>2</sub>eq ton annually by utilizing wind resources. To ensure the transparency and integrity of the validation, the validation team first had established the validation checklist taking into account UNFCCC, Kyoto Protocol, Marrakesh Accords and relevant decisions of the CDM executive board. Based on the checklist the validation of the project activity was undertaken in three stages, i.e. desk review (20 May 2005~27 May 2005), on-site assessment (15 June 2005~30 June 2005) and review of corrective actions (22 August 2005~9 September 2005).

As a result of the desk review and on-site assessment, the validation team identified two Major non-conformities (Major non-conformity No.1~2) and seven Minor non-conformities (Minor non-conformity No.1~7) and then requested the project proponents to take corrective actions against them. In response to the request, the project proponents submitted the revised project documentation to the validation team, of which the validation team made a thorough review. Then the team fully agreed that all the significant non-conformities issued had been cleared.

In conclusion, the validation team is of the opinion that the Gangwon Wind Park Project is in full compliance with all the major requirements for the CDM by leading to emission reductions additional to what would have otherwise occurred, providing for reliable and measurable emission reductions with the well-established monitoring plan and contributing to sustainable development in Korea through reduction of air pollutants, job creation and economic benefits from increased tourists.

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		Noh, Jong Whan	
Date and signature for the DOE		23 December 2005 	
<b>Section below to be filled by UNFCCC secretariat</b>			
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