

MONITORING REPORT FORM (CDM-MR) *

Version 01 - in effect as of: 28/09/2010

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* as contained within the document entitled "Guidelines for completing the monitoring report form (CDM-MR)" (EB 54 meeting report, annex 34).

MONITORING REPORT

Version 01, date 25/03/2011

Jilin province Zhenlai Heiyupao 49.5MW the first phase wind farm project

Reference number: 3111

The first monitoring period: 30/05/2010 ~ 24/03/2011 (both days included)

SECTION A. General description of the project activity

A.1. Brief description of the project activity: >>

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Jilin province Zhenlai Heiyupao 49.5MW the first phase wind farm project (hereafter referred to as “the proposed project”) is a newly built wind-farm project, located in the Zhenlai County, Jilin Province, P. R. China. Totally 33 wind turbines with a nominal capacity of 1500 KW will be installed, providing a total capacity of 49.5MW. The annual electricity supplied by the proposed project is about 100,120 MWh, which will be delivered to the Northeast China Power Grid.

The purpose of the proposed project is to generate electricity by using clean wind resources in Zhenlai area to alleviate electricity shortage in Northeast China. It will contribute to the reduction of GHG emission by displacing part of the electricity from Northeast China Power Grid, which is dominant of fossil fuel fired power plants. The proposed project is estimated to deliver 114,515 tCO₂e emission reductions annually in the first crediting period.

The project started commissioned on 14/08/2009. During this monitoring period (30/05/2010 - 24/03/2011), the total emission reduction achieved is 89908 t CO₂e.

A.2. Project Participants

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Name of Party involved (*) ((host) indicates a host Party)	Private and/or public entity project participants (*) (as applicable)	Kindly indicate if the Party involved wishes to be considered as project participant (Yes/No)
P.R.China (host)	Jilin Taihe Windpower Development Co., Ltd	No
Sweden	Carbon Asset Management Sweden AB	No

(*) In accordance with the CDM modalities and procedures, at the time of making the CDM-PDD public at the stage of validation, a Party involved may or may not have provided its approval. At the time of requesting registration, the approval by the Party(ies) involved is required.

A.3. Location of the project activity:

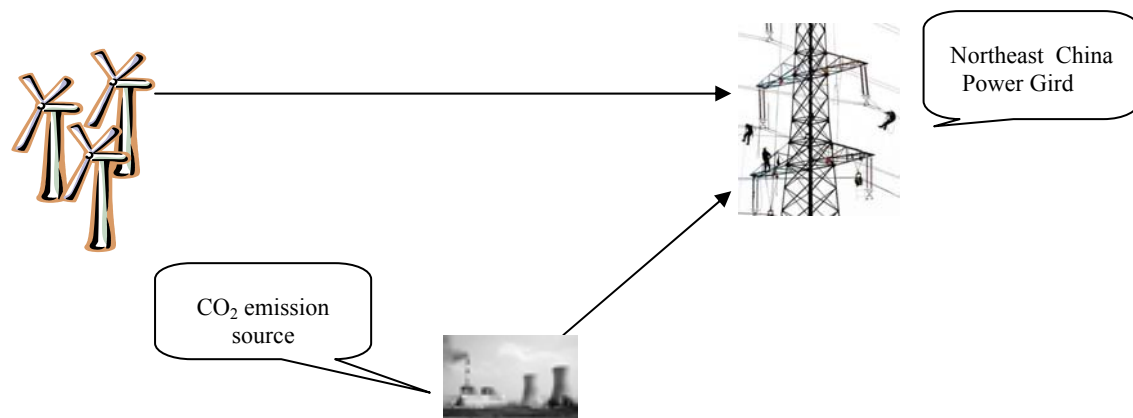
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The project is located in Zhenlai County, Baicheng City, Jilin Province, P. R. China. The geographical coordinates of the project is 123°25'—123°29'E and 45°50'—45°53'N.

A.4. Technical description of the project

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33 units of wind turbines (unit capacity: 1.5MW) will be adopted for this project. The wind turbines transform wind energy to electricity that is to be transmitted to power grid through transformer substation. The technical process can be illustrated by below figure:



A.5. Title, reference and version of the baseline and monitoring methodology applied to the project activity:

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Title of the approved consolidated Baseline and Monitoring methodology: ACM0002-Consolidated baseline methodology for grid-connected electricity generation from renewable sources (Version 09, EB45)

Please click on following link for more information about the methodology and reference:

<http://cdm.unfccc.int/methodologies/PAmethodologies/approved.html>

A.6. Registration date of the project activity:

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Registration date of the project activity is 30/05/2010.

The registration PDD is dated 28/10/2009, version 05.

A.7. Crediting period of the project activity and related information (start date and choice of crediting period):

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Renewable crediting period is chosen for this project. There is no post-registration change to the start date of the first crediting period. The first crediting period of the project activity is from 30/05/2010 to 29/05/2017.

A.8. Name of responsible person(s)/entity(ies):
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The person/entity responsible for completing the monitoring report form (CDM-MR) is Sun Hui from Carbon Asset Management Sweden AB.

Contact information is as follows:

Tel: +86-10-6530 5930-121

Email: hedy.sun@tricornase.se

SECTION B. Implementation of the project activity

B.1. Implementation status of the project activity

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The project is implemented in strict accordance with the description in the registered PDD. No abnormal circumstance occurred during this monitoring period. There were no malfunction, equipment exchange, overhauled, emergencies or special events occurred. The events or situations occurred during the monitoring period has no impact on the applicability of the methodology.

Table below show more information about this project:

Milestone	Time
Construction starting date	10/10/2008
First turbine put into operation	14/08/2009
All turbines put into operation	25/09/2009
Registration date	30/05/2010
Operation lifetime	20 years

B.2. Revision of the monitoring plan

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The monitoring plan of this project has never been revised.

B.3. Request for deviation applied to this monitoring period

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No deviation has been applied to this project.

B.4. Notification or request of approval of changes

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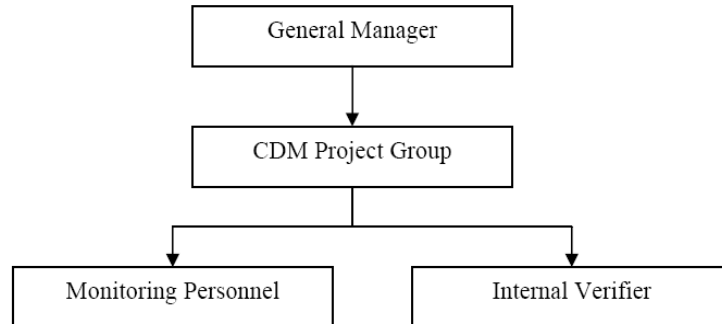
This is never any notification or request of approval of changes from this project.

SECTION C. Description of the monitoring system

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1. Monitoring management structure

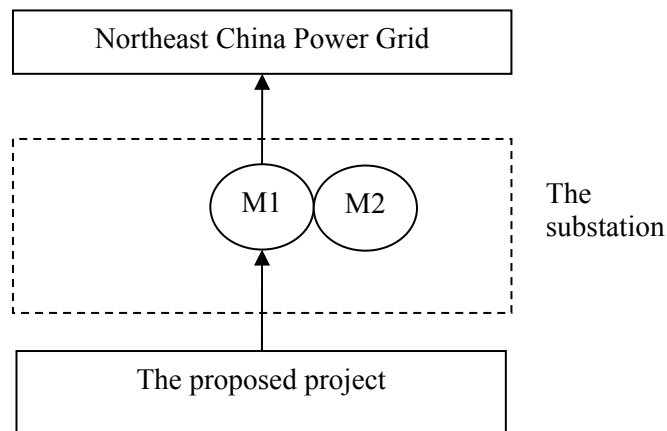
The project owner established a CDM team to monitor all parameters mentioned in the monitoring plan and the structure is shown as below:



2. Meters installation

Electricity supplied to the grid is measured by the main meter (M1) located at the substation. A backup meter (M2) is installed beside the main meter.

In case other wind farms will share the same main meter with the proposed project in the future, an agreement with the Grid Company, project owner of the proposed project and project owner of the new wind project shall be signed. Calculation method of electricity amount accounting shall be clearly identified in this agreement. Location of meters is shown as below:



3. Meters calibration and maintenance

All metering equipments have been properly calibrated according to the industrial standards by qualified entity and according to professional standard or national regulation to make sure the meter is accurate and working properly. Copy of calibration records have been kept by the project owner in a certain place.

4. Data management

The measured data was recorded both in electronic way and in paper way, and all the data was recorded by Monitoring Personnel and checked by Internal Verifier. All monitoring data and records were archived in electronic way and paper document monthly.

5. Emergency plan

Emergency plan is in place. If any error is identified, the project company shall inform the grid company of the error and take emergency action.

SECTION D. Data and parameters

D.1. Data and parameters determined at registration and not monitored during the monitoring period, including default values and factors

Data / Parameter:	$EF_{grid,y}$
Data unit:	t CO ₂ /MWh
Description:	Combined margin CO ₂ emission factor for Northeast Power Grid. in monitoring period
Source of data used:	Calculated according to the procedure outlined in B.6.1 of the registered PDD
Value(s) :	1.1438
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	Baseline calculation
Additional comment:	This parameter is determined ex-ante and used for emission reduction during this monitoring period. For detail, Please refer to the registered PDD.

D.2. Data and parameters monitored

Data / Parameter:	EG_y
Data unit:	MWh
Description:	Electricity delivered to Northeast Power Grid by the project in year y.
Measured /Calculated /Default:	Calculated
Source of data:	Readings of meters.
Value(s) of monitored parameter:	78605 MWh
Indicate what the data are used for (Baseline/ Project/ Leakage emission calculations)	This parameter is used for baseline calculation.
Monitoring equipment (type, accuracy class, serial number, calibration frequency, date of last calibration, validity)	The monitoring meters are bi-directional meters, which can monitor the electricity imported and exported.
Measuring/ Reading/ Recording frequency:	Calculated on the basis of the monitored data $EG_{export,y}$ and $EG_{import,y}$. The value is calculated monthly.
Calculation method (if applicable):	Heiyupao II project connected to the Grid at 14:00, 24/11/2010 and share the main meter and backup meter (M1 and M2) with the proposed project. An agreement was signed to define the calculation method of electricity imported and exported. The calculation method

	<p>of electricity amount accounting was clearly identified in this agreement.</p> <p>Before Heiyupao II project connected to the Grid via the proposed project, net electricity to the grid is calculated as:</p> $EG_y = EG_{\text{export},y} - EG_{\text{import},y}.$ <p>After Heiyupao II project connected, net electricity of this project is calculated as:</p> $EG_y = EG_{\text{export},y} - EG_{\text{import},y} - EG_{\text{net},y}^1$
QA/QC procedures applied:	All meters have been calibrated in accordance with national standard JJG 596-1999 by qualified party annually.

¹ $EG_{\text{net},y}$: Net electricity supplied by HeiyupaoII project.

SECTION E. Emission reductions calculation

E.1. Baseline emissions calculation

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According to the methodology ACM0002 (version 09), the baseline emission include only CO₂ emissions from electricity generation in fossil fuel fired power plants connected to Northeast Power Grid that are displaced due to the proposed project activity, calculated as equation (1):

$$BE_y = (EG_y - EG_{Baseline}) \times EF_{grid,CM,y}$$

(1)

Where,

BE_y Baseline emission in year y(tCO₂/yr)

EG_y The net electricity is delivered to grid during the monitoring period(MWh), and the calculation method refers to the Section E

$EG_{baseline}$ Baseline electricity supplied to the grid in the case of modified or retrofit facilities (MWh). For new power plants, this value is taken as 0.

$EF_{grid,CM,y}$ Emission Factor of the connected grid, it is calculated by the “Tool to calculate the emission factor for an electricity system(version 01)”(tCO₂e/MWh)

According to the methodology, if the project activity is the installation of a new grid-connected renewable power plant/unit, $EG_{baseline} = 0$. Therefore, equation (1) shall be as below:

$$BE_y = EG_y \times EF_{grid,CM,y} \quad (2)$$

According to the registered PDD, the $EF_{grid,CM,y}$ is determined ex-ante, the value is 1.1438 tCO₂e/MWh.

E.2. Project emissions calculation

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According to the methodology, project emission of this project is: $PE_y = 0$.

E.3. Leakage calculation

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According to the methodology, leakage of this project is: $L_y = 0$.

E.4. Emission reductions calculation / table

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The following formulae are used to calculate the emission reductions and the total of the emission reduction achieved.

$$ER_y = BE_y - PE_y - LE_y = BE_y - 0 - 0 = BE_y$$

$$BE_y = (EG_y - EG_{baseline}) \times EF_{grid,CM,y}$$

$$BE_y = EG_y \times EF_{grid,CM,y}$$

Monitoring periods for $EG_{export,y}$	Net electricity output (MWh)	EF (tCO ₂ e/MWh)	Baseline emission (tCO ₂ e)	Project emission (tCO ₂ e)	Leakage emission (tCO ₂ e)
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30/05/2010 ~ 24/03/2011	78605	1.1438	89908	0	0
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Thus, $ER_y = BE_y = 89908 \text{ tCO}_2\text{e}$

E.5. Comparison of actual emission reductions with estimates in the CDM-PDD

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Item	Values applied in ex-ante calculation of the registered CDM-PDD	Actual values reached during the monitoring period
Emission reductions (tCO ₂ e)	114,515 tCO ₂ e/yr	89908 tCO ₂ e

E.6. Remarks on difference from estimated value in the PDD

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During this monitoring period, the actual emission reduction achieved is 89908 tCO₂e, 6.35% less than the value applied in ex-ante calculation of the registered PDD.