



**Monitoring report form
(Version 05.1)**

| MONITORING REPORT | | |
|--|--|---|
| Title of the project activity | CECIC Zhangbei Dayangzhuang Wind Farm Project | |
| UNFCCC reference number of the project activity | 1855 | |
| Version number of the monitoring report | 02 | |
| Completion date of the monitoring report | 07/07/2015 | |
| Monitoring period number and duration of this monitoring period | 7th monitoring period, 01/01/2013-31/05/2015 (first and last days included) | |
| Project participant(s) | CECIC Wind Power (Zhangbei) Yunwei Co. Ltd. – P.R.China (host) Vitol SA - Switzerland | |
| Host Party | P.R. China | |
| Sectoral scope(s) | 01 Energy industries (Renewable sources) | |
| Selected methodology(ies) | Applied methodology: ACM0002 - Consolidated baseline methodology for grid-connected electricity generation from renewable sources (version 07) | |
| Selected standardized baseline(s) | N/A | |
| Estimated amount of GHG emission reductions or net GHG removals by sinks for this monitoring period in the registered PDD | 250,532tCO ₂ e | |
| Total amount of GHG emission reductions or net GHG removals by sinks achieved in this monitoring period | GHG emission reductions or net GHG removals by sinks reported up to 31 December 2012 | GHG emission reductions or net GHG removals by sinks reported from 1 January 2013 onwards |
| | 0 | 257,781tCO ₂ e |

SECTION A. Description of project activity

A.1. Purpose and general description of project activity

>>

The purpose of the CECIC Zhangbei Dayangzhuang Wind Farm Project is to generate renewable electricity using wind power resources and to sell the generated output to the North China Power Grid (NCPG) on the basis of a power purchase agreement (PPA). The project activity generates greenhouse gas (GHG) emission reductions by avoiding CO₂ emissions from electricity generation by fossil fuel power plants that is supplied to NCPG. The project activity involves the installation and operation of 66 wind turbines with unit capacity of 750kW. The total installed capacity is 49.5 MW.

Relevant dates for the Project are as follows:

Construction start date for the project was 28/01/2008;

First wind turbine commission start date was 11/05/2008;

Full operation commission start date was 28/06/2008;

Date of CDM registration was 27/10/2008;

First renewable crediting period was 27/10/2008-26/10/2015.

The total emission reductions achieved in the current monitoring period are 257,781 tCO₂e.

A.2. Location of project activity

>>

The project is located in the southwest of Zhangbei county, Hebei province, P.R. China. The geographic coordinate of the project site is longitude 114°33'04" East to 114°37'23" East and latitude 41°07'22" North to 41°10'36" North. The altitude of the site ranges from 1422m to 1562m above mean sea level.

A.3. Parties and project participant(s)

| Party involved ((host) indicates a host Party) | Private and/or public entity(ies) project participants (as applicable) | Indicate whether the Party involved wishes to be considered as project participant (yes/no) |
|--|--|---|
| People's Republic of China (Host) | CECIC Wind Power (Zhangbei) Yunwei Co. Ltd. | No |
| Switzerland | Vitol SA | No |

A.4. Reference of applied methodology and standardized baseline

>>

The approved methodology and tool applied to this project is:

- ACM0002 "Consolidated baseline methodology for grid-connected electricity generation from renewable sources (version 07)"

- "Tool for the demonstration and assessment of additionality (version 04)"

- "Tool to calculate the emission factor for an electricity system (version 01)"

The applied methodology and tools please refer to the UNFCCC CDM website <http://cdm.unfccc.int/methodologies/DB/C505BVV9P8VSNNV3LTK1BP3OR24Y5L/view.html>

A.5. Crediting period of project activity

>>

Renewable crediting period

First renewable crediting period, 7 years from 27/10/2008 to 26/10/2015.

A.6. Contact information of responsible persons/entities

>>

Dr. Zheng Zhaoning of Goldchina Consultancy International Co., Ltd. is responsible for completing the CDM-MR-FORM and the contact information is as follows:

Address: Room 3103, Tangning One Building, Zhongguancun East Road, Haidian District, Beijing, P.R. of China (100083)

Telephone: (8610)6268 2682

Fax: (8610)6268 2682

Email: zzn01@mails.tsinghua.edu.cn, zzn@gcci-carbon.com

Website: www.gcci-carbon.com

The person/entity is not project participant listed in Appendix 1.

SECTION B. Implementation of project activity

B.1. Description of implemented registered project activity

>>

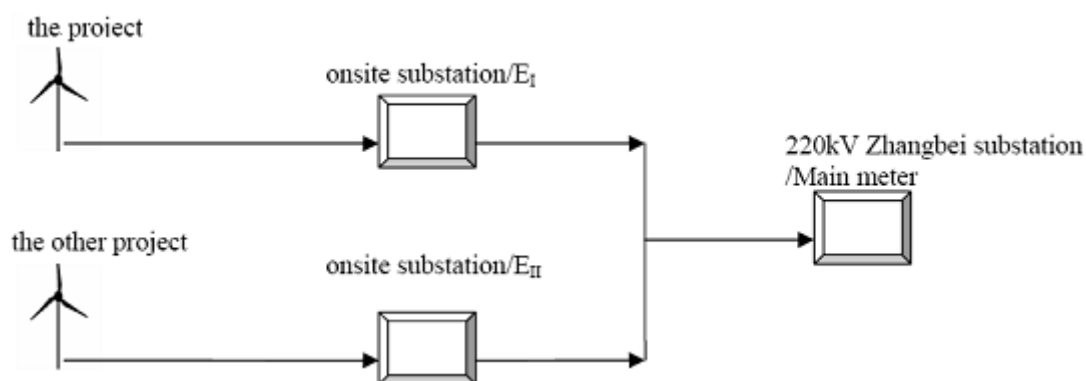
The project started construction on 28/01/2008 and the full operation commission was started on 28/06/2008 from when the wind farm started continued operation up to now. Totally 66 wind turbines of 750kW were installed and operated. The turbines were manufactured by Zhejiang Windey Wind Generating Engineering Co. Ltd.

Table 1 Key technology to be employed at the project wind farm

| Parameter | Value |
|-------------------------------------|---|
| Manufacture | Zhejiang Windey Wind Generating Engineering Co., Ltd. |
| Model | WD49/750kW |
| Rated power (kW) | 750 |
| Number of rotors | 3 |
| Rotor diameter (m) | 49 |
| Swept area (m ²) | 1886 |
| Rated rotor speed (rpm) | 15 |
| Cut-in wind speed (m/s) | 3.5 |
| Rated wind speed (m/s) | 15 |
| Cut-out wind speed (m/s) | 23 |
| Hub height of the wind turbines (m) | 50 to 65 |
| Rated Voltage | 690 |

The wind farm is connected with one expanded 110kV substation, and then connected with 220kV Zhangbei substation via 110kV transmission line. Each wind turbine has a transformer from 690V to 35kV, and connects with the expanded 110kV substation.

The electricity supplied to NCPG by CECIC Zhangbei Dayangzhuang Wind Farm Project shared one electric flow meter (the main meter) at 220kV level with another wind farm (UNFCCC ref: 4095), so the meter at 220kV level measures the total electricity exchanged between NCPG and the two wind farms.



During this monitoring period, the wind farm has a good running, smooth data transfer and grid connection, and no special events happened. Meter E_I (Serial No. 30087147) has been replaced by a new meter (Serial No. 130684955727) at 12:30 of 25/08/2013. Meter E_{II} (Serial No. 30087146) has been replaced by a new meter (Serial No.130684955738) at 12:30 of 25/08/2013. Although the meter change was sufficiently short, the end value of the replaced meters and the original value of the new meters were accurately noted down to ensure the correct measurement of electricity generation and correct calculation of emission reductions. No other events or situations occurred during the current monitoring period that may impact the applicability of the applied methodology.

B.2. Post-registration changes

B.2.1. Temporary deviations from registered monitoring plan, applied methodology or applied standardized baseline

>>

The Project is implemented as the registered PDD and no deviation applied to this monitoring period.

B.2.2. Corrections

>>

The Project is implemented as the registered PDD and no corrections applied to this monitoring period.

B.2.3. Changes to start date of crediting period

>>

There is no change to start date of crediting period.

B.2.4. Inclusion of a monitoring plan to the registered PDD that was not included at registration

>>

Not applicable

B.2.5. Permanent changes from registered monitoring plan, applied methodology or applied standardized baseline

>>

The Project is implemented as the registered PDD and no permanent changes.

B.2.6. Changes to project design of registered project activity

>>

The Project is implemented as the registered PDD and no changes.

B.2.7. Types of changes specific to afforestation or reforestation project activity

>>

Not applicable.

SECTION C. Description of monitoring system

>>

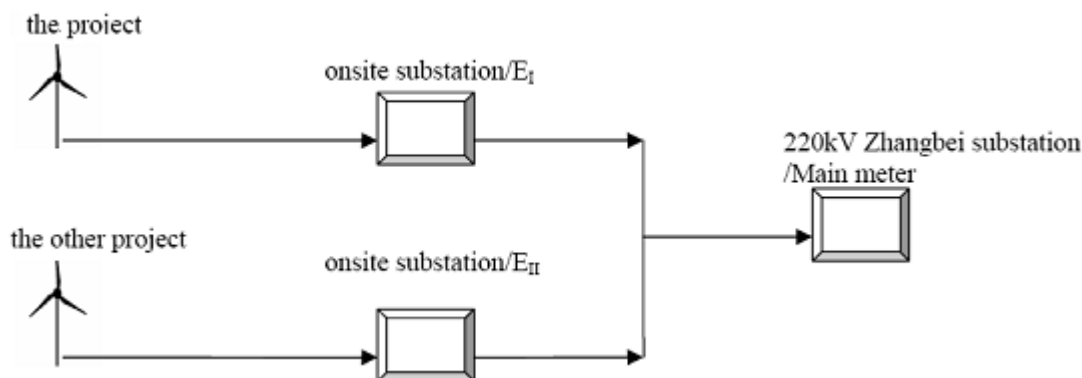
1 Data collection procedures

① Data generation and aggregation:

As described in the monitoring plan, the electricity supplied to NCPG by CECIC Zhangbei Dayangzhuang Wind Farm Project shared one electric flow meter (the main meter) at 220kV level with another wind farm, so the meter at 220kV level measures the total electricity exchanged between NCPG and the two wind farms. The net electricity supplied to the grid by the project (EG_y) is achieved by the following monitored parameters:

| Parameters | Location | Description |
|----------------------|---|--|
| EG _{total} | 220 kV of substation power grid | Electricity exported to the grid by the project and the other project which shares the same main meter with the project. Meter reading was read and recorded by the Power Grid Company and reported to project owner monthly. |
| E _I | 110 kV on site project substation (EI) | Electricity exported to the grid by the project (CECIC Zhangbei Dayangzhuang Wind Farm Project). Meter reading was read and recorded by onsite designated staff on a weekly/monthly basis (each Sunday at 24:00 and last day of the month). |
| E _{II} | 110 kV on site project substation (EII) | Electricity exported to the grid by the other project (Gaojialiang project) which shares the same main meter with the project. Meter reading was read and recorded by onsite designated staff on a weekly/monthly basis (each Sunday at 24:00 and last day of the month). |
| EG _{import} | 220 kV of substation power grid | Electricity imported from the grid by the project and the other wind farm. Meter reading was read and recorded by the Power Grid Company and reported to project owner monthly. To be conservative, the electricity measured by the main meter is considered as the electricity imported by the project. |

The following diagram shows the monitoring points:



②Data calculation:

As described in the monitoring plan, the electricity delivered by CECIC Zhangbei Dayangzhuang Wind Farm Project (EG_y) can be calculated as:

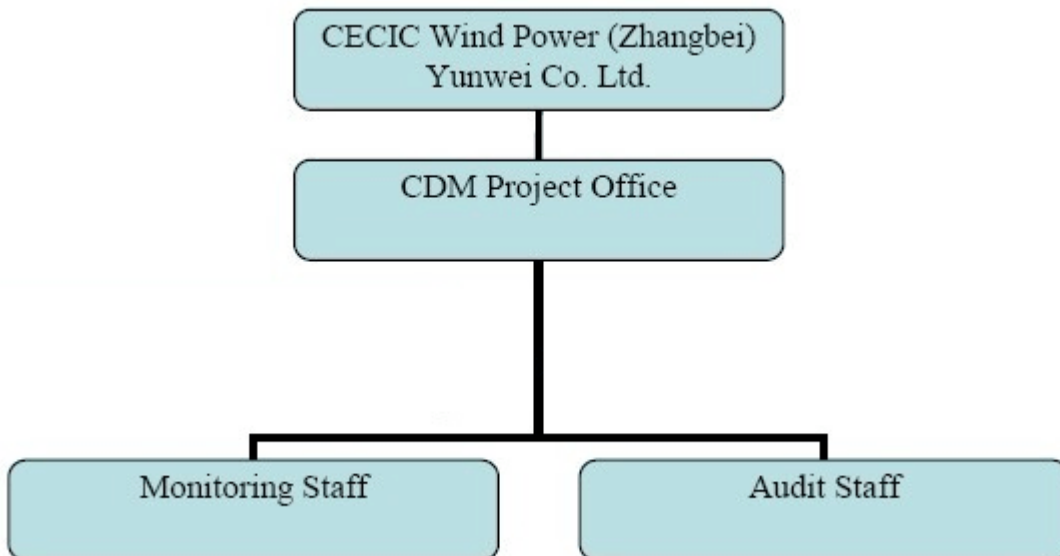
$$EG_{\text{export}} = EG_{\text{total}} \times E_I / (E_I + E_{II})$$

$$EG_y = EG_{\text{export}} - EG_{\text{import}}$$

2 Organizational structure and responsibilities:

Overall responsibility for monitoring and carrying out the monitoring following this monitoring plan lies with CECIC Wind Power (Zhangbei) Yunwei Co. Ltd. The CDM manager of CECIC Wind Power (Zhangbei) Yunwei Co. Ltd. is responsible for the monitoring and reporting of the wind farm.

The operating and management structure is illustrated as follows:



3 Emergency procedures

If the main meter fails to measure, the data measured by the backup meter will be used.

Should any previous months reading of the main meter be inaccurate by more than the allowable error, or otherwise functioned improperly, the net generation output shall be determined by

- (a) The CECIC Wind Power (Zhangbei) Yunwei Co. Ltd. and North China Power Grid shall jointly prepare a reasonable and conservative estimate of the correct reading, and provide sufficient evidence that this estimation is reasonable and conservative when DOE undertakes verification; and
- (b) If North China Power Grid and CECIC Wind Power (Zhangbei) Yunwei Co. Ltd. fail to agree, then the matter will be referred for arbitration according to agreed procedures.

SECTION D. Data and parameters

D.1. Data and parameters fixed ex ante or at renewal of crediting period

| | |
|--|--|
| Data/parameter: | EF_y |
| Unit | tCO ₂ e/MWh |
| Description | Emission factor of NCPG in the monitoring period. |
| Source of data | Registered PDD |
| Value(s) applied | 1.0753 |
| Choice of data or measurement methods and procedures | |
| Purpose of data | Calculation of baseline emissions |
| Additional comments | This parameter is ex ante determined in PDD and fixed during the first crediting period. |

D.2. Data and parameters monitored

(Copy this table for each piece of data and parameter)

| | |
|--|--|
| Data/parameter: | E_1 |
| Unit | MWh |
| Description | Electricity exported to the grid by the project (CECIC Zhangbei Dayangzhuang Wind Farm Project) |
| Measured/calculated/default | Measured |
| Source of data | Meter reading record of onsite substation E_1 meter |
| Value(s) of monitored parameter | Detailed monthly data and calculation is presented in section E1 of the monitoring report. |
| Monitoring equipment | onsite substation E_1 meter Type: Electricity meter Serial Number: 30087147 Model:DTSD847-F4 Accuracy class:0.5S Calibration frequency: Annually Calibration done on: 31/10/2012, Serial Number: 130684955727 Model:DTZ178 Accuracy class:0.2S Calibration frequency: Annually Calibration done on: 17/07/2013, 25/06/2014 validity: Yes |
| Measuring/reading/recording frequency: | Measuring continuously/Recording monthly |
| Calculation method (if applicable): | - |
| QA/QC procedures: | Electricity was measured continuously by the meter E_1 . Trained Staff from the Wind Farm recorded the meter readings manually on monthly basis. Reading records were saved as both hard and electrical copy. The meter readings were also transferred via a remote transmission line to the grid company. The meter was calibrated according to the Chinese industrial standard. The calibration is carried out annually by a qualified organization with the records being supplied to the grid company and project owner. |
| Purpose of data: | Calculation of baseline emissions |

| | |
|----------------------|---|
| Additional comments: | The original meter (Serial No. 30087147) has been replaced by the new meter (Serial No. 130684955727) at 12:30 of 25/08/2013. |
|----------------------|---|

| | |
|--|--|
| Data/parameter: | E _{II} |
| Unit | MWh |
| Description | Electricity exported to the grid by the other project (Gaojialiang project) |
| Measured/calculated/default | Measured |
| Source of data | Meter reading record of onsite substation E _{II} meter |
| Value(s) of monitored parameter | Detailed monthly data and calculation is presented in section E1 of the monitoring report. |
| Monitoring equipment | onsite substation E _{II} meter Type: Electricity meter Serial Number: 30087146 Model:DTSD847-F4 Accuracy class:0.5S Calibration frequency: Annually Calibration done on: 31/10/2012, Serial Number: 130684955738 Model:DTZ178 Accuracy class:0.2S Calibration frequency: Annually Calibration done on:17/07/2013, 25/06/2014 validity: Yes |
| Measuring/reading/recording frequency: | Measuring continuously/Recording monthly |
| Calculation method (if applicable): | - |
| QA/QC procedures: | Electricity was measured continuously by the meter E _{II} . Trained Staff from the Wind Farm recorded the meter readings manually on monthly basis. Reading records were saved as both hard and electrical copy. The meter readings were also transferred via a remote transmission line to the grid company. The meter was calibrated according to the Chinese industrial standard. The calibration is carried out annually by a qualified organization with the records being supplied to the grid company and project owner. |
| Purpose of data: | Calculation of baseline emissions |
| Additional comments: | The original meter (Serial No. 30087146) has been replaced by the new meter (Serial No. 130684955738) at 12:30 of 25/08/2013. |

| | |
|---------------------------------|--|
| Data/parameter: | EG _{total} |
| Unit | MWh |
| Description | Electricity exported to the grid by the project and the other project which share the same main meter with the project |
| Measured/calculated/default | Measured |
| Source of data | Meter reading record of main meter at 220kV substation of power grid |
| Value(s) of monitored parameter | Detailed monthly data and calculation is presented in section E1 of the monitoring report. |

| | |
|--|--|
| Monitoring equipment | Main meter (M) at 220kV substation of power grid Type: electricity meter Serial number: 200407007Z0071 Model (M):DSSD331 Accuracy class: 0.2S Calibration frequency: annually Previous calibration date: 23/10/2012, 14/10/2013, 25/06/2014, Validity: Yes |
| Measuring/reading/recording frequency: | Measuring continuously/Recording monthly |
| Calculation method (if applicable): | N/A |
| QA/QC procedures: | Electricity was monitored continuously by grid company at 220kV substation. The data was monthly recorded at 24:00, last day of the month. Monthly records from grid company was issued, stamped and sent to project owner. Monthly electricity exported to the grid by the project and the other project is cross-checked against sales receipts. The meter was calibrated according to the Chinese industrial standard. The calibration is carried out annually by a qualified organization with the records being supplied to the grid company and project owner. |
| Purpose of data: | Calculation of baseline emissions |
| Additional comments: | - |

| | |
|--|---|
| Data/parameter: | EG_{import} |
| Unit | MWh |
| Description | Quantity of annual electricity imported from the grid by the project. |
| Measured/calculated/default | Measured |
| Source of data | Meter reading record of main meter at 220kV substation of power grid |
| Value(s) of monitored parameter | Detailed monthly data and calculation is presented in section E1 of the monitoring report. |
| Monitoring equipment | Main meter (M) at 220kV substation of power grid Type: electricity meter Serial number: 200407007Z0071 Model (M):DSSD331 Accuracy class: 0.2S Calibration frequency: annually Previous calibration date: 23/10/2012, 14/10/2013, 25/06/2014, Validity: yes |
| Measuring/reading/recording frequency: | Measuring continuously/Recording monthly |
| Calculation method (if applicable): | N/A |
| QA/QC procedures: | Electricity was measured continuously by grid company at 220kV substation. The data was recorded at 24:00, last day of the month, and summarized monthly. Monthly records from grid company was issued, stamped and sent to project owner. Monthly electricity imported from the grid by the project is cross-checked against sales receipts. The meter was calibrated according to the Chinese industrial standard. The calibration is carried out annually by a qualified organization with the records being supplied to the grid company and project owner. |
| Purpose of data: | Calculation of baseline emissions |
| Additional comments: | - |

| | |
|------------------------|---|
| Data/parameter: | EG_{export} |
| Unit | MWh |
| Description | Quantity of annual electricity exported to the grid by the project. |

| | |
|--|--|
| Measured/calculated/default | Calculated from measured data of E_I , E_{II} , and EG_{total} |
| Source of data | Meter readings from E_I , E_{II} and EG_{total} |
| Value(s) of monitored parameter | Detailed monthly data and calculation is presented in section E1 of the monitoring report. |
| Monitoring equipment | Main meter installed at the Zhangbei 220kV substation and the electricity meters installed in the wind farms. |
| Measuring/reading/recording frequency: | Measuring continuously/Recording monthly |
| Calculation method (if applicable): | $EG_{export} = EG_{total} \times E_I / (E_I + E_{II})$ |
| QA/QC procedures: | Electricity was recorded by grid company at 220kV substation. The data was monthly recorded. Monthly records from grid company was issued, stamped and sent to project owner. Monthly electricity exported to the grid by the project is cross-checked against sales receipts. The meter was calibrated according to the Chinese industrial standard. The calibration is carried out annually by a qualified organization with the records being supplied to the grid company and project owner. |
| Purpose of data: | Calculation of baseline emissions |
| Additional comments: | - |

| | |
|--|--|
| Data/parameter: | EG_y |
| Unit | MWh |
| Description | The net electricity supplied to the grid by the project |
| Measured/calculated/default | Derived from the difference between EG_{export} and EG_{import} and the direct measurement results of EG_{total} , E_I , E_{II} and EG_{import} |
| Source of data | Meter readings from E_I , E_{II} , EG_{total} and EG_{import} |
| Value(s) of monitored parameter | Detailed monthly data and calculation is presented in section E1 of the monitoring report. |
| Monitoring equipment | Main meter installed at the Zhangbei 220kV substation and the electricity meters (E_I and E_{II}) installed in the wind farms. |
| Measuring/reading/recording frequency: | Measuring continuously and recording monthly |
| Calculation method (if applicable): | It was calculated from equation: $EG_{export} = EG_{total} \times E_I / (E_I + E_{II})$ $EG_y = EG_{export} - EG_{import}$ |
| QA/QC procedures: | The data are calculated by project owner before reported to DOE. Internal auditing reduced the risk of error caused by data transfer and calculation mistakes. Monthly electricity exported to the grid and imported from the grid by the project is cross-checked against sales receipts. The meters were calibrated according to the Chinese industrial standard. The calibration is carried out annually by a qualified organization with the records being supplied to the grid company and project owner. |
| Purpose of data: | Calculation of baseline emissions |
| Additional comments: | - |

D.3. Implementation of sampling plan

>>

Not applicable.

SECTION E. Calculation of emission reductions or GHG removals by sinks

E.1. Calculation of baseline emissions or baseline net GHG removals by sinks

>>

The baseline emissions in year y is calculated as

$$BE_y = EG_y \times EF_y$$

The detailed calculation of EG_y is calculated below:

$$EG_{\text{export}} = EG_{\text{total}} \times E_I / (E_I + E_{II})$$

$$EG_y = EG_{\text{export}} - EG_{\text{import}}$$

| Period | E_I (MWh) | E_{II} (MWh) | EG_{total} (MWh) | EG_{export} (MWh) | EG_{import} (MWh) | EG_y (MWh) |
|---|-------------------|-------------------|------------------------------|-------------------------------|-------------------------------|-------------------|
| 01/01/2013 - 31/01/2013 | 9588.480 | 7442.160 | 17,007.410 | 9575.401 | 49.764 | 9,525.637 |
| 01/02/2013 - 28/02/2013 | 6828.800 | 5418.160 | 12,217.260 | 6812.240 | 62.172 | 6,750.068 |
| 01/03/2013 - 31/03/2013 | 10463.200 | 8862.480 | 19,289.030 | 10443.357 | 52.668 | 10,390.689 |
| 01/04/2013 - 30/04/2013 | 10994.720 | 10968.320 | 21,898.800 | 10962.561 | 24.288 | 10,938.273 |
| 01/05/2013 - 31/05/2013 | 9914.960 | 10686.720 | 20,568.370 | 9898.929 | 45.936 | 9,852.993 |
| 01/06/2013 - 30/06/2013 | 8117.120 | 8429.520 | 16,464.490 | 8076.820 | 74.184 | 8,002.636 |
| 01/07/2013 - 31/07/2013 | 5824.720 | 5280.000 | 11,080.740 | 5812.142 | 86.856 | 5,725.286 |
| 01/08/2013 - 12:30 25/08/2013 * | 4618.240 | 4121.040 | 11,468.030 | 5993.594 | 66.528 | 5,927.066 |
| 12:30 25/08/2013 - 31/08/2013 | 1386.000 | 1363.120 | | | | |
| 01/09/2013 - 30/09/2013 | 6996.000 | 6734.640 | 13,645.900 | 6952.823 | 75.240 | 6,877.583 |
| 01/10/2013 - 31/10/2013 | 7807.360 | 7005.680 | 14,769.080 | 7784.190 | 97.680 | 7,686.510 |
| 01/11/2013 - 30/11/2013 | 10172.800 | 8120.640 | 18,256.260 | 10152.125 | 80.388 | 10,071.737 |
| 01/12/2013 - 31/12/2013 | 10353.200 | 6794.480 | 17,084.100 | 10314.813 | 109.824 | 10,204.989 |
| Total from 01/01/2013 - 31/12/2013 | 103065.600 | 91226.960 | 193749.470 | 102778.995 | 825.528 | 101953.467 |
| 01/01/2014 - 31/01/2014 | 9639.872 | 7851.008 | 17,451.590 | 9618.218 | 63.492 | 9,554.726 |
| 01/02/2014 - 28/02/2014 | 5152.048 | 3654.112 | 8,762.160 | 5126.306 | 214.500 | 4,911.806 |
| 01/03/2014 - 31/03/2014 | 9317.440 | 8041.440 | 17,305.330 | 9288.697 | 100.320 | 9,188.377 |
| 01/04/2014 - 30/04/2014 | 6291.120 | 5802.720 | 12,022.430 | 6253.973 | 102.696 | 6,151.277 |
| 01/05/2014 - 31/05/2014 | 10938.400 | 11166.320 | 22,046.110 | 10909.397 | 50.028 | 10,859.369 |
| 01/06/2014 - 30/06/2014 | 4242.480 | 4164.160 | 8,322.600 | 4200.069 | 150.876 | 4,049.193 |
| 01/07/2014 - 31/07/2014 | 5792.160 | 5936.480 | 11,672.100 | 5764.238 | 111.144 | 5,653.094 |

| | | | | | | |
|---|-------------------|-------------------|-------------------|-------------------|-----------------|-------------------|
| 01/08/2014 – 31/08/2014 | 4315.520 | 4226.640 | 8,468.988 | 4278.553 | 115.764 | 4,162.789 |
| 01/09/2014 – 30/09/2014 | 4212.560 | 4700.960 | 8,899.704 | 4206.031 | 104.544 | 4,101.487 |
| 01/10/2014 – 31/10/2014 | 7879.520 | 6790.960 | 14,654.380 | 7870.873 | 76.824 | 7,794.049 |
| 01/11/2014 – 30/11/2014 | 9214.480 | 7763.360 | 16,913.820 | 9179.734 | 119.460 | 9,060.274 |
| 01/12/2014 – 31/12/2014 | 15411.440 | 11674.080 | 27,054.850 | 15393.989 | 32.472 | 15,361.517 |
| Total from 01/01/2014 - 31/12/2014 | 92407.040 | 81772.240 | 173574.062 | 92090.078 | 1242.120 | 90847.958 |
| 01/01/2015 - 31/01/2015 | 11194.480 | 8036.160 | 18,929.460 | 11019.158 | 105.600 | 10,913.558 |
| 01/02/2015 - 28/02/2015 | 5798.320 | 4253.920 | 9,987.516 | 5760.986 | 116.820 | 5,644.166 |
| 01/03/2015 - 31/03/2015 | 11462.000 | 10322.400 | 21,736.040 | 11436.555 | 90.420 | 11,346.135 |
| 01/04/2015 – 30/04/2015 | 9342.080 | 8640.720 | 17,804.690 | 9249.552 | 83.028 | 9,166.524 |
| 01/05/2015 – 31/05/2015 | 10010.880 | 9666.800 | 19,464.720 | 9902.538 | 42.900 | 9,859.638 |
| Total from 01/01/2015 - 31/05/2015 | 47807.760 | 40920.000 | 87922.426 | 47368.789 | 438.768 | 46930.021 |
| Total | 243280.400 | 213919.200 | 455245.958 | 242237.862 | 2506.416 | 239731.446 |

The detailed calculation of BE_y is calculated below:

| Monitoring Period | EG _y (MWh) | EF _y (tCO ₂ e/MWh) | BE _y (tCO ₂ e) |
|-------------------------|--------------------------|---|---|
| 01/01/2013–31/12/2013 | 101,953.467 | 1.0753 | 109,630 |
| 01/01/2014 –31/12/2014 | 90,847.958 | 1.0753 | 97,688 |
| 01/01/2015 – 31/05/2015 | 46,930.021 | 1.0753 | 50,463 |
| Total | 239731.446 | | 257,781 |

E.2. Calculation of project emissions or actual net GHG removals by sinks

>>

The project is wind power project, as a renewable energy project, the project emissions of the Project are zero.

E.3. Calculation of leakage

>>

As per the methodology ACM0002, as a renewable energy project, the leakage of this project is zero.

E.4. Summary of calculation of emission reductions or net GHG removals by sinks

| Item | Baseline emissions or baseline net GHG removals by sinks (t CO ₂ e) | Project emissions or actual net GHG removals by sinks (t CO ₂ e) | Leakage (t CO ₂ e) | GHG emission reductions or net GHG removals by sinks (t CO ₂ e) achieved in the monitoring period | | |
|-----------------------|--|---|-------------------------------|--|-----------------|--------------|
| | | | | Up to 31/12/2012 | From 01/01/2013 | Total amount |
| 01/01/2013–31/05/2015 | 257,781 | 0 | 0 | 0 | 257,781 | 257,781 |

E.5. Comparison of actual emission reductions or net GHG removals by sinks with estimates in registered PDD

| Item | Values estimated in ex ante calculation of registered PDD | Actual values achieved during this monitoring period |
|--|---|--|
| Emission reductions or GHG removals by sinks (t CO ₂ e) | 250,532 | 257,781 |

*The estimated annual emission reductions are 103,796tCO₂e as per registered PDD. The monitoring period covers 881 days, $103,796 \times 881 / 365 = 250,532$ tCO₂e.

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

>>

The actual emission reductions generated in the monitoring period are 257,781 tCO₂e, 2.9% higher than the estimated emission reductions in the registered PDD. The difference between the actual emission reductions and estimated emission reductions during the current monitoring period can be reasonably attributed to the fluctuation of the wind energy.

|

Appendix 1. Contact information of project participants and responsible persons/entities

| | |
|--|---|
| Project participant and/or responsible person/ entity | <input checked="" type="checkbox"/> Project participant <input type="checkbox"/> Responsible person/ entity for application of the selected methodology (ies) and, where applicable, the selected standardized baselines to the project activity |
| Organization name | CECIC Wind Power (Zhangbei) Yunwei Co. Ltd. |
| Street/P.O. Box | |
| Building | |
| City | Zhangjiakou City, |
| State/Region | Hailiutu Village, Zhangbei County, Hebei Province |
| Postcode | 076750 |
| Country | P.R. China |
| Telephone | +86 10 8833 7332 |
| Fax | +86 10 8833 7350 |
| E-mail | Dongjuan.Chen@gmail.com |
| Website | |
| Contact person | Ms. Chen Dongjuan |
| Title | |
| Salutation | |
| Last name | Chen |
| Middle name | |
| First name | Dongjuan |
| Department | |
| Mobile | |
| Direct fax | +86 10 8833 7332 |
| Direct tel. | +86 10 8833 7350 |
| Personal e-mail | Dongjuan.Chen@gmail.com |

| | |
|--|---|
| Project participant and/or responsible person/ entity | <input checked="" type="checkbox"/> Project participant <input type="checkbox"/> Responsible person/ entity for application of the selected methodology (ies) and, where applicable, the selected standardized baselines to the project activity |
| Organization name | Vitol SA |
| Street/P.O. Box | Arve 28 CH 1205 |
| Building | Boulevard Du Pont-D |
| City | Geneve |
| State/Region | |
| Postcode | 3841211 |
| Country | Switzerland |
| Telephone | +41 22 322 11 11 |
| Fax | +41 22 781 66 11 |
| E-mail | dbf@vitol.com |
| Website | |
| Contact person | David Fransen |
| Title | Manageing director |

| | |
|------------------------|------------------|
| Salutation | Mr, |
| Last name | Fransen |
| Middle name | |
| First name | David |
| Department | |
| Mobile | |
| Direct fax | +41 22 781 66 11 |
| Direct tel. | +41 22 322 11 11 |
| Personal e-mail | dbf@vitol.com |

| | |
|--|--|
| Project participant and/or responsible person/ entity | <input type="checkbox"/> Project participant <input checked="" type="checkbox"/> Person/entity responsible for completing the CDM-MR-FORM |
| Organization name | Goldchina Consultancy International Co., Ltd. |
| Street/P.O. Box | Zhongguancun East Road |
| Building | Tangning One Building |
| City | Beijing City |
| State/region | |
| Postcode | 100083 |
| Country | P.R. China |
| Telephone | +86 10 62682682 |
| Fax | +86 10 62682682 |
| E-mail | zzn01@mails.tsinghua.edu.cn, zzn@gcci-carbon.com |
| Website | |
| Contact person | Zheng Zhaoning |
| Title | |
| Salutation | |
| Last name | Zhaoning |
| Middle name | |
| First name | Zheng |
| Department | |
| Mobile | |
| Direct fax | +86 10 62682682 |
| Direct tel. | +86 10 62682682 |
| Personal e-mail | zzn01@mails.tsinghua.edu.cn, zzn@gcci-carbon.com |

- - - - -

Document information

| <i>Version</i> | <i>Date</i> | <i>Description</i> |
|---|-----------------|--|
| 05.1 | 4 May 2015 | Editorial revision to correct version numbering. |
| 05.0 | 1 April 2015 | Revisions to: <ul style="list-style-type: none"> • Include provisions related to delayed submission of a monitoring plan; • Provisions related to the Host Party; • Remove reference to programme of activities; • Overall editorial improvement. |
| 04.0 | 25 June 2014 | Revisions to: <ul style="list-style-type: none"> • Include the Attachment: Instructions for filling out the monitoring report form (these instructions supersede the "Guideline: Completing the monitoring report form" (Version 04.0)); • Include provisions related to standardized baselines; • Add contact information on a responsible person(s)/ entity(ies) for completing the CDM-MR-FORM in A.6 and Appendix 1; • Change the reference number from <i>F-CDM-MR</i> to <i>CDM-MR-FORM</i>; • Editorial improvement. |
| 03.2 | 5 November 2013 | Editorial revision to correct table in page 1. |
| 03.1 | 2 January 2013 | Editorial revision to correct table in section E.5. |
| 03.0 | 3 December 2012 | Revision required to introduce a provision on reporting actual emission reductions or net GHG removals by sinks for the period up to 31 December 2012 and the period from 1 January 2013 onwards (EB70, Annex 11). |
| 02.0 | 13 March 2012 | Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20). |
| 01 | 28 May 2010 | EB 54, Annex 34. Initial adoption. |
| Decision Class: Regulatory Document Type: Form Business Function: Issuance Keywords: monitoring report | | |