

SHANDONG WENDENG ZHANGJIACHAN WIND FARM PROJECT

Document Prepared By CGN Carbon Asset Management (Beijing) Co., Ltd.

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1 PROJECT DETAILS

1.1 Summary Description of the Project

Shandong Wendeng Zhangjiachan Wind Farm Project (hereinafter referred to as the proposed project) is to utilize wind resources for electricity generation through the construction of a wind farm with a total capacity of 49.3MW in Wendeng City, Shandong Province, P. R. China. The electricity generated from the project will be sold to North China Power Grid (NCPG). The proposed project will achieve obvious greenhouse gas (GHG) emission reductions through the displacement of electricity delivered by NCPG which is a fossil-fuel dominated grid.

The proposed project is located in Wendeng City, Shandong Province, P. R. China. The proposed project involves the installation of 58 wind turbines with capacity of 850 kW each, which amount to a total installed capacity of 49.3MW. The proposed project is constructed and operated by Wendeng Zhangjiachan Wind Power Co., Ltd.. The estimated annual net electricity generation and average annual emission reductions of the proposed project are 90,997MWh and 84,709 tCO₂e, respectively.

1.2 Sectoral Scope and Project Type

Category: Renewable electricity in grid connected application

Sectoral Scope 1: Energy Industry

The project is not a grouped project.

1.3 Project Proponent

Organization name	Wendeng Zhangjiachan Wind Power Co., Ltd.
Contact person	Shi Lei
Title	CDM office director
Address	Area 12 of Advanced Business Park, No. 188 west of South 4th Ring Road, No.2 Building, Beijing, The People's Republic of China
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1.4 Other Entities Involved in the Project

There are no other entities involved.

1.5 Project Start Date

26/02/2011 (commissioning start date)

1.6 Project Crediting Period

The project crediting period is from 26/02/2011 to 29/02/2012 and the total crediting period is 369 days.

1.7 Project Scale and Estimated GHG Emission Reductions or Removals

Project Scale	
Project	✓
Large project	

Year	Estimated reductions (tCO ₂ e)	GHG or emission removals
Year 1 (26/02/2011 to 31/12/2011)	71,712	
Year 2 (01/01/2012 to 29/02/2012)	13,925	
Total estimated ERs	85,637	
Total number of crediting years	12 months and 4 days	
Average annual ERs	84,709	

1.8 Description of the Project Activity

The proposed project is to utilize wind resources for electricity generation in Wendeng City, Shandong Province, P. R. China. The proposed project is a grid-connected renewable energy project. Prior to the start of implementation of the project activity, there is no power generation unit at the site of the proposed project, and the electricity was supplied by the NCPG. The baseline scenario of the proposed project is providing the same electricity service as the proposed project by NCPG which is dominated by the fossil-fuel fired power plants.

The proposed project involves the installation of 58 wind turbines with capacities of 850kW each, which amount to a total installed capacity of 49.3MW. The estimated power output is 90,997MWh and the plant load factor (PLF) is 21%. The annual operation hour is 1,846h.

The lifetime of the project is 20 years.

1.9 Project Location

The proposed project is located at Wendeng City, Shandong Province, P. R. China. The geographical coordinates of the proposed project is from 122.051944 E to 122.155278 E, and from 37.093611 N to 37.181667 N. The central geographical coordinate of the proposed project is 122.103611 E, 37.137639 N. Figures A1 and A2 show the geographical location of the proposed project.

Figure A1. The location of the proposed project in the map of P. R. China

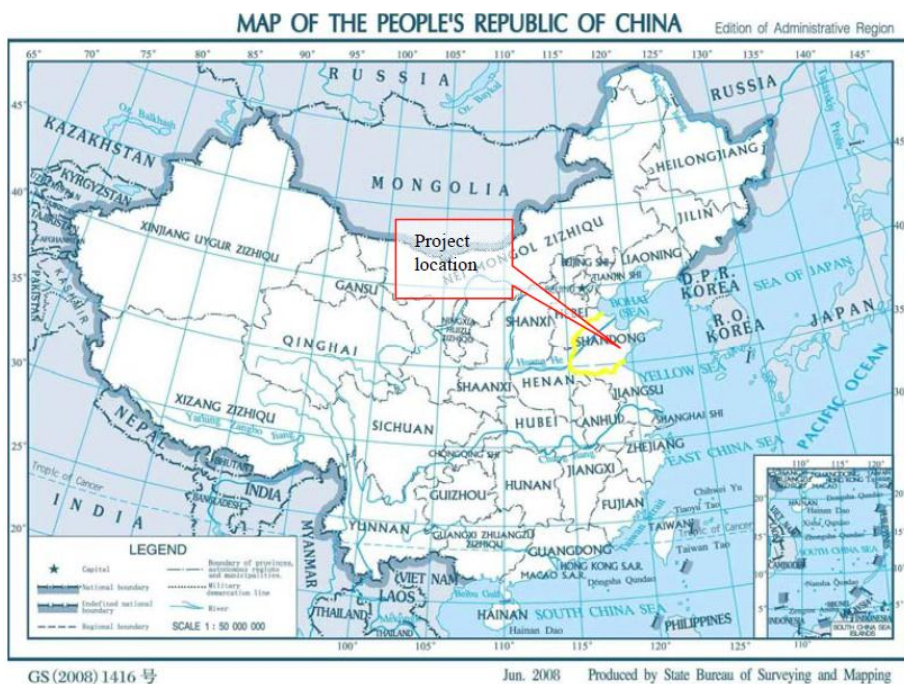


Figure A2. The proposed project on the map of Shandong Province and Wendeng County



1.10 Conditions Prior to Project Initiation

The project activity is the installation of a new grid-connected wind power project and the generated power shall be exported to the NCPG. Electricity delivered to the grid by the project activity would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources within NCPG.

The project is a renewable resource based on wind power project without GHG emissions during operation period. Therefore, it was confirmed that the project has not been implemented to generate GHG emissions for the purpose of their subsequent reduction, removal or destruction.

1.11 Compliance with Laws, Statutes and Other Regulatory Frameworks

The project complies with all Chinese relevant laws and regulations. It also obtained the approval letters from governmental authorities: Development and Reform Commission (DRC), as well as Environment Protection Bureau (EPB) of Shandong Province. The two approvals well demonstrate that local government permits the construction of the project. Consequently, the project is compliance with laws, status and other regulatory frameworks.

1.12 Ownership and Other Programs

1.12.1 Right of Use

The business license is the evidence for right of use. The approval of FSR and EIA are evidences for legislative right. Besides, the purchasing contract of wind turbine and the power purchase agreement are the evidences for the ownership of the plant, equipment and process generating.

1.12.2 Emissions Trading Programs and Other Binding Limits

The project has been registered as a CDM project on 17/01/2012 with Ref No.5655, for which a renewable crediting period of 3*7 years will be used under the CDM GHG Program. Therefore, CO₂ emission reductions generated by the project during the CDM crediting period will be verified as unique CERs, but not VCUs to avoid double counting. As to the project under VCS standard (Version. 3.4), only emission reduction achieved from 26/02/2011 to 29/02/2012 will be considered as VCUs.

1.12.3 Other Forms of Environmental Credit

The project neither has nor intends to generate any other form of GHG-related environmental credit for GHG emission reductions or removals claimed under the VCS Program for the period from 26/02/2011 to 29/02/2012.

1.12.4 Participation under Other GHG Programs

The project has been registered as CDM project and the registration number is 5289, the CDM crediting period is form 01/03/2012 to 28/02/2019.

1.12.5 Projects Rejected by Other GHG Programs

NA

1.13 Additional Information Relevant to the Project

Eligibility Criteria

NA

Leakage Management

According to the consolidated methodology ACM0002 (Version 12.2.0), the leakage of the project is not considered.

Commercially Sensitive Information

No commercially sensitive information has been excluded from the public version of the project description.

Further Information

No further information is required.

2 APPLICATION OF METHODOLOGY

2.1 Title and Reference of Methodology

The approved methodology applied in the proposed project activity is ACM0002 (version 12.2.0) – “Consolidated baseline methodology for grid-connected electricity generation from renewable sources”.

“Tool for the demonstration and assessment of additionality (version 05.2.1)” and

“Tool to calculate the emission factor for an electricity system (version 02.2.1)” is also applied in the proposed project.

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

2.2 Applicability of Methodology

The approved methodology ACM0002 is applicable to the project activity, because:

- a. The Project is a newly-built 49.3MW grid-connected renewable energy (i.e. wind power) power plant at a site where no renewable power plant was operated prior to the implementation of the project activity.
- b. The Project does not involve an on-site switch from fossil fuels to a renewable source.

Therefore, the baseline methodology ACM0002 (version 12.2.0) is applicable to the project activity.

2.3 Project Boundary

The project had been registered as a UNFCCC CDM project with Ref No.5655, Please refer to the Section B.3 of the PDD.

2.4 Baseline Scenario

The project had been registered as a UNFCCC CDM project with Ref No. 5655, Please refer to the Section B.4 of the PDD.

2.5 Additionality

The project had been registered as a UNFCCC CDM project with Ref No. 5655, Please refer to the Section B.5 of the PDD.

2.6 Methodology Deviations

There is no deviation of the adopted methodology.

3 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

3.1 Baseline Emissions

The project had been registered as a UNFCCC CDM project with Ref No.5655, Please refer to the Section B.6 of the PDD.

3.2 Project Emissions

The project had been registered as a UNFCCC CDM project with Ref No.5655, Please refer to the Section B.6 of the PDD.

3.3 Leakage

The project had been registered as a UNFCCC CDM project with Ref No.5655, Please refer to the Section B.6 of the PDD.

3.4 Net GHG Emission Reductions and Removals

The project had been registered as a UNFCCC CDM project with Ref No.5655, Please refer to the Section B.6.4 of the PDD.

4 MONITORING

4.1 Data and Parameters Available at Validation

The project had been registered as a UNFCCC CDM project with Ref No.5655, Please refer to the Section B.6.2 of the PDD.

4.2 Data and Parameters Monitored

The project had been registered as a UNFCCC CDM project with Ref No.5655, Please refer to the Section B.7 of the PDD.

4.3 Monitoring Plan

The project had been registered as a UNFCCC CDM project with Ref No.5655, Please refer to the Section B.7.2 of the PDD.

5 ENVIRONMENTAL IMPACT

The project had been registered as a UNFCCC CDM project with Ref No.5655, Please refer to the Section D of the PDD.

6 STAKEHOLDER COMMENTS

The project had been registered as a UNFCCC CDM project with Ref No.5655, Please refer to the Section E of the PDD.