

CECIC Zhangbei Dayangzhuang Wind Farm Project

(Project ID Number 1855)

(GS ID Number 424)

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Annex to the PDD

Version 03

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GS Annex to PDD

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1. Executive Summary

1.1 Brief description of the Project

The CECIC Zhangbei Dayangzhuang Wind Farm Project is located in Zhangbei County, Hebei Province, P.R. China, consists of the implementation and operation of 66 wind turbines each with a unit capacity of 750 kW. The total capacity of the project is 49.5 MW and the estimated annual electricity supplied to the grid is about 96,530MWh at the full capacity. The generated output will be sold to the North China Power Grid (NCPG) on the basis of a power purchase agreement (PPA). The emission reductions of the project activity are estimated to be approximately 103,796 tonnes of CO₂e per year by avoiding CO₂ emissions from electricity generation by fossil fuels power plants supplied to NCPG.

The project has contributed to the growth of the wind power industry in China; created local employment opportunities during the assembly and installation of wind turbines and for the operation of the wind farm; and reduced other pollutants resulting from the power generation industry, compared to a business-as-usual approach, such as SO_x and soot.

The project activity was registered as a CDM project on 27 October 2008. For detailed information, please refer to:

<http://cdm.unfccc.int/Projects/DB/BV011211950998.53/view>.

The CECIC Zhangbei Dayangzhuang Wind Farm Project is applying for retroactive registration because:

- the project is already registered and operational;
- the project has applied an equally rigorous project development procedure credibly and transparently, particularly with respect to the stakeholder consultation and assessment of additionality;
- the project complies with Gold Standard criteria.

The project proponent is applying to use version 1 for retroactive registration because:

- On 2 June 2008, the relevant documents were submitted to the Gold Standard Technical Advisory Committee for a Pre-feasibility Assessment for retroactive registration;
- On 28 June 2008, a positive GS-TAC report was received and the project was 'listed' in the GS VER Registry.

The project proponent therefore elects to apply for retroactive registration under GS version 1 because it is stated in GS version 2 that '*project proponents that apply for retroactive registration by submitting the required project documentation before 1 September 2008 shall be permitted to apply under Gold Standard version 1 if they so choose*'.

The project proponent is also applying for pre-CDM GS VERs because criteria required to claim them can be satisfied, namely:

- the project proponent can provide proof that the final draft version of the PDD was submitted for validation to the DOE prior to 31st January 2008¹;
- the project proponent can provide a reasonable explanation as to why there is mismatch between the start of project operation and the registration date (27 October 2008);
- at the time of the GS validation, DOE will be notified of the requirement of providing a verification report covering the GS VER period either with the first verification of the GS CERs or separately;

¹ <http://cdm.unfccc.int/Projects/Validation/index.html>. The PDD submitted for validation is 23st January 2008.

- the project proponent is committed not to claim credits over and above the crediting period and expected volume it is registered to under the Gold Standard from other independent or proprietary VER standards, neither before nor after the Gold Standard crediting period.

1.2 Summary of Social Impacts

The main impacts of the project on local social and economic development are largely positive. They include:

- a contribution to the sustainability of power generation in North China through reducing reliance on exhaustible fossil fuel-based power sources;
- the creation of local employment opportunities during the construction and operation periods;
- an increase local tax revenues through the profits generated from the electricity sold to the Grid;
- a reduction of a possible power shortage through the supply of electricity to the rapidly growing North China Power Grid;
- the promotion and development of sustainable renewable energy.

1.3 Summary of Environmental Impacts

The project has positive impacts on the local environment particularly through:

- Reducing air pollution and global emissions of greenhouse gases, as the electricity delivered to the grid by the project would have otherwise been generated by the operation of grid-connected power plants and by the addition of new generation sources, which in North China are mostly coal-fired;
- Reducing reliance on exhaustible fossil fuel-based power sources through the use of renewable energy.

During the construction period, there were limited and insignificant negative impacts relating to soil erosion, sewage, waste water, noise and air pollution. The construction period is now over and the effective environmental protection measures were adopted to reduce negative effects during the construction period.

During the operation period, the negative impacts on the environment are not considered significant. For further details on environmental impacts and mitigation measures, please refer to EIA and its approval paper.

The project has followed the recommendations of the Environmental Impact Assessment and its approval strictly. As a result, all ecological restoration measures have been implemented and an excellent environmental protection system has been established. As a result, on 27 November 2008, the Hebei Province Environment Protection Bureau approved the 'Acceptance of Project Environment Protection Completion' document of the project.

1.4 Summary of Gold Standard Compliance

The following table summarizes the compliance of the project with the Gold Standard:

Criteria	Compliance	Source (this document)	Comment
Project eligibility screen	OK	p. 6	The project uses wind power, a renewable energy resource, to generate electricity; therefore it is eligible for GS registration.
Additionality screen	OK	p. 7	The project was registered as a

			CDM project on 27 Oct 2008.
Previous announcement check	OK	p. 7	There was no announcement of the project going ahead without the revenues from carbon credits.
The UNFCCC's additionality tool	OK	p. 7	The PDD used the current UNFCCC's additionality tool to demonstrate the project's additionality (Ver 04). This was validated by the auditor.
Official Development Assistance additionality	OK	p. 7	The project did not receive any assistance from government agencies that provide financial flows to developing countries.
Conservative approach	OK	p. 8	It is conservative which is demonstrated by the registered PDD.
Technology and/or knowledge innovation	OK	p. 8	The turbines used advanced technology transferred from Germany to China ² . Employees of the project were trained for operating and maintaining the turbines by the wind turbine manufacturer. The technology applied in the project was transferred from an Annex 1 country.
Sustainable development screen	OK	p. 10	
Sustainable development assessment	OK	P10-15	<p>The score is listed as following:</p> <ul style="list-style-type: none"> • Local/global environmental sustainability: +2 • Social sustainability and development: +1 • Economic and Technological development: +1 <p>Total score = +4</p> <p>There are no indicators with negative scores.</p>
EIA requirements	OK	p. 15	
Public Consultations	OK	p. 15	
Monitoring Plan for Sustainable development assessment	OK	p. 17	

² <http://www.chinawindey.com/showproducts.asp?ID=135>

2. Project Type Eligibility Screen

Project should match one of the following project types:

Project type	Select
Renewable Energy	
Solar thermal (Electricity, Heat)	<input type="checkbox"/>
Ecologically sound biomass, biogas and liquid biofuels (Heat, electricity, cogeneration, transport)	<input type="checkbox"/>
Wind	<input checked="" type="checkbox"/>
Geothermal	<input type="checkbox"/>
Small low-impact Hydro, size limit of 15 MW, complying with WCD guidelines	<input type="checkbox"/>
End Use Energy Efficiency Improvement	
Industrial energy efficiency	<input type="checkbox"/>
Domestic energy efficiency	<input type="checkbox"/>
Energy efficiency in the transport sector	<input type="checkbox"/>
Energy efficiency in the public sector	<input type="checkbox"/>
Energy efficiency in the agricultural sector	<input type="checkbox"/>
Energy efficiency in the commercial sector	<input type="checkbox"/>
Compliance:	
The project uses wind power, a renewable energy resource, to generate renewable electricity and sell the generated output to the North China Power Grid (NCPG), therefore, it is eligible for the Eligibility Screen Assessment of Gold Standard.	<input checked="" type="checkbox"/>

3. Additionality Screen

3.1. Previous Announcement Check

In cases where a public announcement has been made of the project going ahead without the CDM, prior to any payment being made for the implementation of the project, the project is not eligible for the Gold Standard, except in cases where the project was subsequently cancelled.

Compliance:

No public announcements had been made about the project going ahead without CDM. Without CERs sale revenue, the IRR of the project was only 6.11%, less than the benchmark IRR (8%), thus the project would have faced a financial barrier and would not have been financially attractive to investors. With CER sales revenues, the project's IRR was improved significantly and exceeded the benchmark IRR, therefore, the CDM registration of the project activity was very important to overcome the financial barrier, by offering greater returns and improving the confidence of the project developer and the bank.

The project activity was registered on Oct 27 2008.

The more information, please refer to:

<http://cdm.unfccc.int/Projects/DB/BVQI1211950998.53/view>.

Evidence supporting above argumentation:

Please refer to the PDD and the Validation Report.

3.2. the UNFCCC's Additionality Tool

Compliance with the Tool for the demonstration and assessment of additionality; that provides evidence that the project is additional through a series of analyses.

Compliance:

Additionality is demonstrated in the PDD by the application of the "Tool for the Demonstration and Assessment of Additionality (Ver 04)" issued by the EB. The Validation Report confirms that the Additionality Tool demonstrated that the emission reductions of the project were additional.

Evidence supporting above argumentation:

<http://cdm.unfccc.int/Projects/DB/BVQI1211950998.53/view>

3.3 Official Development Assistance (ODA) Additionality

ODA funding encompasses funds to developing countries and multilateral institutions provided by government agencies whose main objective is the economic development and welfare of developing countries and that are concessional in character, conveying a grant element of at least 25%.

Compliance:

The project was only financed with equity and commercial loans from banks. No ODA funds were used to finance this project. The Validation Report confirms that the validation process did not reveal any information which indicated that there was a diversion of ODA, nor any other kind of public funding.

Please refer to the PDD, the Validation Report and the relevant documents.

Evidence supporting above argumentation:

<http://cdm.unfccc.int/Projects/DB/BVOI1211950998.53/view>

3.4. Conservative Approach

The most convincing baseline approach is to be selected, and the choice shall be justified. It is important that the methodology chosen should lead to a conservative estimate of the baseline.

Compliance:

The baseline scenario selection and the calculation of greenhouse gas emission reductions were carried out in a conservative manner:

- the CDM Executive Board's methodology ACM0002 Version 07 was used in order to determine the baseline scenario and calculate emission reductions;
- the likely baseline scenarios were developed and assessed using guidance provided by the methodology ACM0002 Version 07 and the 'Tool for the demonstration and assessment of Additionality' Version 04;
- the most conservative baseline scenario was selected;
- calculations were done in a transparent manner providing full documentation and references to data sources to the DOE.

Evidence supporting above argumentation:

<http://cdm.unfccc.int/Projects/DB/BVOI1211950998.53/view>

3.5. Technology Transfer and/or Knowledge Innovation

The project positively contributes to North-South and in-country urban-rural technology transfer.

Compliance:

66 750kW turbines were supplied by Zhejiang Windey Wind Generating Engineering Co. Ltd. The turbines used advanced technology transferred from Germany³ to China, which resulted in a significantly better performance than any common used technologies in China at that time. The employees of the project were trained for operating and maintaining the turbines by the wind turbine manufacturer.

The technology applied in the project was transferred from an Annex 1 country and was not available in the domestic market at the time.

³ <http://www.chinawindey.com/showproducts.asp?ID=135>

The project positively contributes to North-South and in-country urban-rural technology transfer. This can be confirmed by the validation report published on the UNFCCC website.

Evidence supporting above argumentation:

<http://cdm.unfccc.int/Projects/DB/BVQI1211950998.53/view>

4. Sustainable Development Screen

The project contributes to the PRC's aim to achieve sustainable development, which includes environmental protection, social advancement, human rights and economic development.

4.1 Sustainable Development Assessment

The project's contribution to sustainable development is assessed on the basis of three components:

- local/global environment sustainability;
- social sustainability and development;
- economic and technological development.

The project's performance is assessed using the following scoring system:

- -2: major negative impacts, i.e. where there is significant damage to ecological, social and/or economic systems that cannot be mitigated through preventive (not remedial) measures;
- -1: minor negative impacts, i.e. where there is a measurable impact but not one that is considered by stakeholders to mitigate against the implementation of the project activity or cause significant damage to ecological, social and/or economic systems;
- 0: no, or negligible impacts, i.e. there is no impact or the impact is considered insignificant by stakeholders;
- +1: minor positive impacts;
- +2: major positive impacts.

In order to be eligible for the Gold Standard:

- each of the components must have a sub-total score that is non-negative;
- the total score must be positive;
- if one of the indicators has a score of -2, the project is not eligible for the Gold Standard.

The Sustainable Development Matrix below is based on the PDD, validation report, EIA and FSR. Also, the indicators were discussed with stakeholders affected by the project in the second-round stakeholder meeting.

Sustainable Development Assessment Matrix

A Local/global Environmental Sustainability	Score for Indicators	Justification and Reference
A.1 Water		
A.1.1 Water Quantity	+1*	
<i>This indicator is used to evaluate the project's contribution to water availability and access locally and regionally. Number of people with access to water supply in comparison with the baseline.</i>		The project does not require water other than for office use. Compared to the baseline scenario where large quantities of water are used by the fossil fuel-fired power plants on the grid. In arid Hebei Province the project therefore has a beneficial impact on water quantity. Please refer to the EIA pp.7-48, EIA approval.
A.1.2 Water Quality	0	
<i>This indicator is used to evaluate the contribution of the project to water quality</i>		The project does not impact the water quality as no significant water pollutants are released. The negative

<p><i>locally and regionally in the project's area in comparison with the baseline. Water quality will be measured using concentration of main pollutants (including BOD and others) in any effluents generated by the project activity and their contribution, if any, to local water quality.</i></p>		<p>impact of the project to the local water quality is negligible.</p> <p>Compared to the baseline scenario where large quantities of water are used by the fossil fuel-fired power plants on the grid, in arid Hebei province the project therefore has a beneficial impact on water quality.</p> <p>Please refer to the EIA pp.1-48, EIA approval.</p>
<p>A.2 Air Quality</p>	<p>+1*</p>	
<p><i>This indicator is used to evaluate the contribution of the project to local air quality. Air quality will be measured by comparing the concentration of most relevant air pollutants (e.g.: SOx, NOx, particulate matters etc.) generated by the project activity with the baseline.</i></p>		<p>The project is a wind farm project using wind power to generate renewable electricity, compared with the baseline scenario, comparable capacity and additional electricity generation provided by NCPG, the air quality has improved.</p> <p>The project has helped reduce GHG emissions versus the high-growth, coal-dominated business-as-usual scenario, reduce other pollutants resulting from the power generation industry, compared to a business-as-usual approach, such as SO₂ and soot.</p> <p>Please refer to the EIA pp.1-48, EIA approval.</p>
<p>A.3 Other Pollutants</p>	<p>0</p>	
<p><i>This indicator is used to evaluate the contribution of the project activity to reducing the flow of pollutants not already considered to the environment, including solid, liquid and gaseous wastes.</i></p>		<p>During the construction period, the project generated some air, water, solid waste and noise pollution. However, preventative measures were taken and the construction period is now over.</p> <p>During the operation period, the pollutants are considered insignificant. The project reduces other pollutants resulting from the power generation industry, compared to a business-as-usual approach, such as solid, liquid, and gaseous wastes. The impact therefore is considered zero.</p> <p>Please refer to EIA pp.149.</p>
<p>A.4 Soil Condition</p>	<p>0</p>	
<p><i>This indicator is used to evaluate the contribution of the project activity to local soil condition. Soil condition will be measured by comparing the concentration of most relevant soil pollutants, erosion and the extent of land use changes due to the project with the baseline.</i></p>		<p>The soil condition was only affected during the construction period of the proposed project activity, with some grass land dug up and the potential for dust forming. Also, transport to the project site during construction caused some additional dust. However, the site was carefully managed so as to limit any disruption, the suggestions in the EIA were adopted and the construction is now finished. The impact therefore is considered minimal.</p> <p>Please refer to the EIA p.1-40, EIA approval.</p>
<p>A.5 Contribution to Biodiversity</p>	<p>0</p>	
<p><i>This indicator is used to evaluate the</i></p>		<p>The project has neither contributed nor reduced</p>

<p><i>contribution of the project to local biodiversity. The change in biodiversity is estimated on a qualitative basis considering any destruction or alteration of natural habitat compared to the without projects scenario. A positive change will be given by previously disappeared species re-colonising the area, a negative change will be given by species disappearing or by introduction of foreign species. In judging this, inputs from local communities should be considered a key resource.</i></p>		<p>biodiversity; the wind farm only occupies a small area of the total site. During construction, the influence on wildlife and domestic animals was little.</p> <p>During operation period, the impact on bird life has been minimal as the site is not on specific migration routes. In the baseline scenario, continued emissions from the fossil fuel-fired power plants may have negatively affected biodiversity in the area. The impact of the project, therefore, is conservatively considered zero.</p> <p>Please refer to the EIA pp.1-40, EIA approval.</p>
<p>Resulting Score for Sub-total</p>	<p>+2</p>	
<p>B Social Sustainability and Development</p>		
<p>B.1 Employment (quality)</p>	<p>+1*</p>	
<p><i>This indicator is used to evaluate the qualitative value of employment, such as whether the jobs resulting from the project activity are highly or poorly qualified, temporary or permanent in comparison with BAU. Take temporary and permanent as well as job-related Health and Safety (H&S) impacts as qualifications for job quality.</i></p>		<p>The project has had a positive impact on overall employment quality. The construction and operation of the wind farm generated new jobs in a high-tech environment. Training was provided to the staff on-site by the wind turbine supplier at the early stage of the project. Ongoing training is provided for the staff operating the wind farm.</p> <p>Please refer to the PDD, Validation Report, FSR pp.120-136 and training records.</p>
<p>B.2 Livelihoods of the poor</p>		
<p><i>This indicator comprises a number of sub-indicators. Where a sub-indicator is not relevant to the project, it should be ignored. After all the relevant variables have been considered, the total score should be non-negative.</i></p>		
<p>B.2.1 Poverty alleviation</p>	<p>0</p>	
<p><i>This sub-indicator is used to evaluate the project contribution to poverty alleviation. Poverty alleviation will be evaluated by calculating the change in number of people living above income poverty line compared to baseline.</i></p>		<p>The project creates local employment opportunity, but the project does not directly contribute to poverty alleviation, other than through opportunities for work.</p> <p>Please refer to FSR pp.1-130.</p>
<p>B.2.2 Livelihoods of the poor: Contribution to equitable distribution and additional opportunity for disadvantaged sectors</p>	<p>0</p>	
<p><i>This sub-indicator is used to evaluate contribution of the project to equitable distribution of wealth and opportunity, in particular gender and marginal or excluded social groups. The indicator combines</i></p>		<p>Although the project has created local employment opportunities, it does not directly contribute to poverty alleviation, other than through opportunities for work.</p> <p>Please refer to the FSR pp. 1-128.</p>

<i>quantitative - changes in estimated earned income (normalised to the project's starting year) compared with the baseline – and qualitative assessment - improved opportunities.</i>		
B.2.3 Access to essential services (water, health, education, access to facilities, etc.)	0	
<i>Access to essential services will be taken as an indicator of social sustainability, measured by the number of additional people gaining access in comparison with the baseline. Access must be directly related to the service and not an unintended impact.</i>		The project will not directly increase the access to essential services, other than through additional generation which alleviates electricity shortages. Please refer to FSR pp. 1-119.
B.3 Access to affordable clean energy services	0	
<i>The CDM provide an important opportunity to improve the coverage of reliable and affordable clean energy services, especially to the poor and in rural areas. Where of a relevant scale, security of energy supply (an indicator of a country's ability to generate the power that is needed for services and the economy in comparison with the baseline), should be taken into account.</i>		The project provides clean renewable electricity to the grid, increasing the capacity and therefore increasing the access to energy services. However, the renewable electricity has not reduced the price of electricity for local people. Therefore, the impact is considered zero. Please refer to FSR pp. 1-130 and Validation Report.
B.4 Human Capacity		
<i>This indicator is used to assess the project's contribution to raising the capacity of local people and/or communities to participate actively in social and economic development. It comprises three indicative sub-indicators:</i>		
B.4.1 Empowerment	0	
<i>The sub-indicator is used to evaluate the project's contribution to improving the access of local people to and their participation in community institutions and decision-making processes.</i>		It was a requirement of the stakeholder process for the CDM project activity that the local people were allowed to contribute. Please refer to the PDD and Validation Report.
B.4.2 Education/skills	0	
<i>The sub-indicator is used to assess how the project activity enhances and/or requires improved and more widespread education and skills in the community.</i>		While the project requires new skills and training for employees operating the wind farm, it has not directly affected education and skills in the community. Please refer to the FSR pp. 1-89.
B.4.3 Gender equality	0	
<i>The sub-indicator is used to assess how the project activity requires or enhances improvement of the empowerment,</i>		In China, the women have the same social status with the men, and it is prescribed by the Chinese law, therefore, the project does not have a gender impact.

<i>education/skills and livelihoods of women in the community.</i>		Please refer to the FSR pp. 1-89.
Resulting Score for Sub-total	+1	
C Economic and technological development		
C.1 Employment (numbers)	+1*	
<i>Net employment generation will be taken as an indicator of economic sustainability, measured by the number of additional jobs directly created by the CDM project in comparison with the baseline.</i>		The construction of the power plant provided around 67 jobs. Around 17 jobs ⁴ were created for power plant operation and maintenance. Therefore, the number of jobs has been greater for the project activity as compared to the baseline scenario. Please refer to FSR pp. 10-130 and personnel files.
C.2 Sustainability of the balance of payments	0	
<i>Net foreign currency savings may result through a reduction of, for example, fossil fuel imports as a result of CDM projects. Any impact this has on the balance of payments of the recipient country may be compared with the baseline.</i>		The project activity required significant investment in equipment manufactured in China as well as imported equipment. The developer found some debt and equity from outside Hebei Province, thus reducing the impact on the balance of payments. However, the generation from the project offset imports of electricity. In addition, the implementation of the project led to a reduction in coal consumption in the electricity sector. With internal coal prices significantly below the world market prices, coal may be exported and impact positively on the balance of payments. Overall the impact on the balance of payments for Hebei province, it is considered zero. Please refer to the FSR pp. 1-68 and the Main Equipment Agreement.
C.3 Hard currency expenditures on technology, replicability and contribution to technological self-reliance	0	
<i>As the amount of expenditure on technology changes between the host and foreign investors, a decrease of foreign currency investment may indicate an increase of technological sustainability. When CDM projects lead to a reduction of foreign expenditure via a greater contribution of domestically produced equipment, royalty payments and license fees, imported technical assistance should decrease in comparison with the baseline. Similarly a reduced need for subsidies and external technical support indicates increased self-</i>		While many of the components used for the wind farm were produced within China, the project in itself has had little impact on the country's technological self-reliance. Please refer to the PDD and Validation Report.

⁴ CECIC Wind Power (Zhangbei) Yunwei Co. Ltd staff roster.

<i>reliance and technology transfer.</i>		
Resulting Score for Sub-total	+1	
Overall score	+4	

Note: The report uses existing data, input from the stakeholder consultation and the opinions and judgements of independent local experts. The scoring is reproducible, verifiable and provided with full transparency.

The project activity shows a positive performance in all sustainable development components, therefore the project activity fulfills all Gold Standard criteria since none of the indicators have a score of -2, there is no negative sub-total and the total score is positive.

The Validation Report confirms that the project is in line with relevant legislation of China and the sustainable development policies of China.

The Validation Report endorses that the project contributed to sustainable development in the region by reducing pollution, creating employment opportunities and improving the livelihoods of local people.

The detailed reference, please refer to:

<http://cdm.unfccc.int/Projects/DB/BVQI1211950998.53/view>.

4.2 Environmental Impacts Assessment (EIA) Requirements

The Gold Standard requires an EIA when required by the host country and/or the CDM Executive Board.

In China, EIA approval is required and compulsory in order to get project planning approval. The EIA for the project was completed by the Hebei Academy of Engineering Consulting and was approved by the Environmental Protection Bureau of Hebei Province on 4 September, 2007.

At an early stage of the project design, the project participants considered:

- alternative technologies, sites and resource uses;
- the compatibility with other existing policies, programmes and projects;
- that the assessment covered an appropriate area of influence, and the identification of environmental and socio-economic impacts was deep and broad enough;
- that the public consultation had began early and stakeholder views has been incorporated into the design of the project activity;
- that the Environmental Impact Assessment had addressed the questions raised during the public consultation period;
- that the measures for the proposed impact mitigation and compensation activities were credible and feasible;
- that the monitoring plan was appropriate and feasible.

No significant impacts were identified. A description of the environmental impacts of the project activity is included in the PDD. According to the PDD, the EIA and its approval, the wind farm project would have very little negative impact on the local environment; therefore, the project is feasible from the perspective of environment protection.

The project has followed the recommendations of the Environmental Impact Assessment and its approval strictly. As a result, all ecological restoration measures have been implemented and an excellent environmental protection system has been established. As a result, on 27 November 2008, the Hebei Province Environment Protection Bureau approved the 'Acceptance of Project Environment Protection Completion'

document of the project.

For the detailed environment information, please refer to the PDD, the EIA and its approval, the Acceptance of Project Environment Protection Completion’.

4.3 Public Consultations

Gold standard CDM projects are required to consult with relevant stakeholders at two phases in the project cycle:

- consultation of local stakeholders in the design phase (First-round Stakeholder Consultation);
- consultation of (local) stakeholders on the Project Design Document (PDD) (Second-round Stakeholder Consultation).

4.3.1 First-round Stakeholder Consultation

On 10 May 2007, the consultation was carried out by the developer in the Zhangbei County. These resulted in a support letter for the project by the local government. All contacted stakeholders responded and filled in the questionnaires, among them villagers, farmers, businessmen and students.

The outcome of the first-round stakeholder consultation was positive; the project had strong local support among local people, as further evidenced by the local government support letter.

4.3.2 Second-round Stakeholder Consultation

After the GS-TAC Pre-feasibility Assessment and in order to comply with the requirements of retroactive accreditation for the Gold Standard, a Second-round Stakeholder Consultation hearing was organized in the vicinity of the project site on 7 August 2008. During the meeting, a non-technical project description and the outcome of the Pre-feasibility Assessment were presented to the stakeholders; the Sustainable Development indicators were discussed; and previous stakeholders were asked to comment on the way concerns raised during the First-round Stakeholder Consultation had been taken into account, and stakeholders completed detailed questionnaires.

The meeting had the following characteristics:

- all people and organizations involved in the first consultation, plus international/local NGOs and other local people were invited to provide their input into the project;
- it was held at the project site and conducted orally;
- the project was presented to the community in a non-technical way and in Chinese;
- questionnaires were collected and analyzed.

On 22 August 2008, the report of the Second-round Stakeholder Consultation Hearing was posted on the GS VER Registry and <http://carbonresource.com> (the project proponent’s website) for comments. On the same day, 10 representatives from international NGOs were sent copies directly, and received the support letter from REEEP⁵.

No negative comments were received.

⁵ Support letter to the CECIC Zhangbei Dayangzhuang Wind Farm Retroactive Gold Standard CDM Project, issued by REEEP.

5. Monitoring Plan for Sustainable Development Indicators

The choice of indicators for the Gold Standard is based on the issues that have been highlighted in the Sustainable Development Assessment Matrix as critically important for the sustainable development contribution of the project.

In terms of the Monitoring Plan, the project meets the specific requirements of the Gold Standard because:

- the Monitoring Plan of the project has made an accurate assessment of key sustainable development indicators, mitigation measures and quality requirements (after implementation of the emission reductions resulting from the project);
- the monitoring data has been interpreted conservatively, and the relevant data has been clearly identified and described ;
- indicators of the Sustainable Development Assessment Matrix that are critical for a positive contribution of the project to sustainable development or that are particularly sensitive have been clearly identified, and added to the monitoring plan with a description of the methodology of indicators and data collection.

Monitoring Data

The indicators that will be monitored are displayed as below:

Indicator:	-Number of jobs
Description:	Jobs created by the proposed project, during operation of the project
Monitoring approach	Monitored through checking the staff roster and employment contract.
Data source and frequency	This indicator will be checked at the time of verification and/or at least once a year.

Indicator:	Employment quality
Description:	The project will offer training for employees for the operating of the wind farm. This indicator will be monitored.
Monitoring approach	Personnel records of the training schedule undertaken by employees of the wind farm
Data source and frequency	This indicator will be checked at the time of verification and/or at least once a year.

Indicator:	Emission reduction of soot, SO ₂ and NO _x (ER-soot, ER-so ₂ ,ER-no _x)
Description:	Monitored via the monitoring of the net supplied power, together with the use of publicly available data on average emissions per MWh of the thermal power plant in China. ER-soot=EF-soot* EGy ER- so ₂ =EF- so ₂ * EGy ER-no _x =EF-no _x * EGy
Monitoring approach	The baseline of the project is defined in the registered PDD as: Electricity delivered to the grid by the project activity would have otherwise been

	<p>generated by the operation of grid-connected power plants and by the addition of new generation sources.</p> <p>According to Page 115 of the FSR, the per MWh emission of the soot, SO₂ and NO_x (EF-soot, EF- so₂, EF-no_x) of the baseline are: EF-soot =3.27 t/MWh, EF- so₂=5.82 t/MWh, EF-no_x=3.27 t/MWh</p> <p>Therefore, ER-soot=EF-soot* EGy=3.27* EGy ER- so₂=EF- so₂* EGy=5.82* EGy ER-no_x =EF-no_x * EGy=3.27* EGy</p> <p>EFy(MWh) is the net supplied power during the monitoring period y, monitored in line with CDM criterion.</p>
Data source and frequency	This indicator will be checked at the time of verification and/or at least once a year.

Indicator:	Water quantity
Description:	Monitored via the monitoring of the net supplied power, together with the use of publicly available data on average water consumption per MWh of thermal power plant in China.
Monitoring approach	Water consumption per unit electricity generation is an important index in measuring the utilization level of water resources in power generation. In 2002, water consumption of thermal power plant is 3.54 t/MWh. (http://www.sp-china.com/environmental/a.html)
Data source and frequency	This indicator will be checked at the time of verification and/or at least once a year.

Annex 1

Response to Gold Standard Technical Advisory Committee (GS-TAC) Pre-feasibility Assessment dated on 28 June 2008

Details of requests for clarifications by the GS-TAC are highlighted in the table below. In response, the issues are addressed directly or a reference has been made to the relevant section of a document.

1. Sustainable Development Assessment Matrix

- Please provide appropriate reference sources for all justification paragraphs of each of the indicators.

Response:

The justification and scores of the Sustainable Development Assessment Matrix are sourced from the FSR, EIA, training records, and other evidence. In order to make the justification and scores more clear, the appropriate pages and reference sources are detailed in the Sustainable Development Assessment Matrix. All the evidences have been submitted to the auditor during the GS validation.

- Employment quality: Please ensure that more details about employment quality, such as technical training certificates of the employees, will be provided to the DOE.

Response:

The project owner has established a detailed training plan, including safety, wind farm technology, operation and maintenance of the turbines, and personnel information. The project owner keeps a record of all training results, and staffs are not able to start work without relevant technical training certificates. The relevant training records will be submitted to the DOE for validation.

- Employment numbers: Please provide the number of people that were employed for the construction phase and the number of permanent employees needed for the operational phase. Please ensure that the sources of those numbers will be properly referenced and added to the matrix.

Response:

During the construction of the proposed wind farm, there were around 100 workers employed on a short term basis. The evidences have been submitted to the DOE for validation.

The wind farm is now in operation. Around 17 permanent jobs were created for the operation and maintenance of the project. The number of jobs has been well documented in the personnel file⁶ and has been provided to the DOE for validation.

- Please consider adding both employment quality and quantity indicators to the monitoring plan as they represent a positive contribution to local sustainable development.

⁶ CECIC Wind Power (Zhangbei) Yunwei Co. Ltd staff roster.

Response:

Indicators for both employment (number) and employment (quality) have been included in the Monitoring Plan as they represent a positive contribution to local sustainable development.

2. Stakeholder Consultation.

- For the first consultation meeting, please provide to the DOE the list of the invited stakeholders, with organisation names and representatives, and the signatures of the meeting attendees.

Response:

Comments from the First-round Stakeholder Consultation were collected from the questionnaires, and we have the handwritten names of the stakeholders on each questionnaire sheet. An attendance sheet for the Second-round Stakeholder Consultation with signatures has been provided to the DOE.

- Please also provide a copy of the posting, flyer, newspaper article, email or other advertisement source that was used to invite participants to the meeting.

Response:

The First-round Stakeholder Consultation was carried out in the form of questionnaires. During the face-to-face meetings, the project owner introduced the background of the proposed project and then made a questionnaire survey using a random sampling.

Some photographs have been submitted to the DOE during the validation interview.

- For the next stakeholder consultation, please ensure that the suggestions brought up in your GS-annex are properly documented when submitted. These suggestions are in line with GS requirements.

Response:

For the Second-round Stakeholder Consultation, the suggestions brought up by the stakeholders have been well documented, such as questionnaires and photographs. The suggestions are in line with GS requirements. Please refer to the separate Second-round Stakeholder Consultation Report.

3. Monitoring.

- Please provide a monitoring plan for the sensitive sustainable indicators to be monitored.

Response:

The sensitive sustainable indicators of the project have been identified and listed in the Monitoring Plan. The monitoring plan describes the sustainable indicators clearly, and the relevant information has been submitted to the DOE upon validation.

- Please include any mitigation or compensation measures proposed in the EIA, particularly the adopted ongoing vegetation restoration measures.

Response:

During the construction period, the project owner adopted many measures to preserve the environment. The land utilized for the stationing of the wind farm was small and the environmental impact was minimal. Other land was only temporarily occupied and the restoration work was done as soon as construction work of the wind project was completed. Grass and flowers were planted in the affected area.

During the Second-round Stakeholders Consultation hearing, the stakeholders expressed their satisfaction towards the quality of the restoration of vegetation. It should be noted that in the PRC, if the restoration of vegetation has not met the requests raised in the EIA, the project will not be approved by the designated Environment Protection Bureau.

The project site is remote from the residential areas and has been under operation for some time. Notwithstanding, during the operation period, the project owner has established rules to protect the environment, and preserve the ecological status. Since the commencement of operation there has been no damage to the vegetation. Therefore there is no need to monitor this measure during the operation period.

To summarize, the project owner adopted that relevant mitigation and compensation measures brought up in the EIA during both the construction and operation periods. Also a company report outlined detailed measures to sustain the environment, as suggested in the EIA.

As a result, on 27 November 2008, the Hebei Province Environment Protection Bureau approved the 'Acceptance of Project Environment Protection Completion' document of the project.