

# Carbon Quick Scan <sup>TM</sup>

## 1 PROJECT PARTICIPANTS

### 1.1 Seller / Contractual Party

Name of the Company	Guangdong Wind Power Development Co.,Ltd
Role in the CDM/JI project (project owner, intermediary)	Project Owner
Business address, zip code + city, country	
Postal address, zip code + city, country	
Website URL	

### 1.2 Corresponder's data (if intended Seller is represented by a third party)

Name of the Company	Guangzhou Institute of energy conversion, Chinese Academy of Science
Role in the CDM/JI Project (project developer, transaction advisor)	CDM project developer/consultant, also one of the project investor
Business Address, zip code + city, country	
Postal Address, zip code + city, country	
Website URL	

Contact person	Luo zhigang
Job title	
Direct phone	
Fax	
Mobile phone	
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## 2 PROJECT INFORMATION

### 2.1 Key project data

Project Title	Guangdong 49.5MW Wind Power Gereneration Project
Host country	China
Location	Jiangzhan, Guangdong Province
Project type	<input type="checkbox"/> <b><u>Renewable energy: Wind / Hydro / Biomass / Other .....</u></b> <input type="checkbox"/> Energy efficiency / fuel switch / CHP <input type="checkbox"/> Landfill gas extraction or other methane reduction <input type="checkbox"/> N <sub>2</sub> O reduction <input type="checkbox"/> HFC reduction <input type="checkbox"/> Afforestation/Reforestation
Brief description of the project ( 100 words maximum)	<p>This wind farm lies in Guangdong Province. 33 wind turbines with the nominal capacity of 1500KW will be installed. That means the total installed capacity amounts to 49.5MW. It is expected that the annual operation hours are 1660 hours and the total annual electricity generation of 82.16Gwh will be supplied to the China South Power Grid which is dominated by fossil-fueled power projects.</p> <p>The objective of the proposed project is to generate electricity using state-of-the-art wind power generation technology and to sell it into China South Power Grid, thus achieving the annual CO<sub>2</sub> emission reduction of 70,662 tons CO<sub>2</sub> equivalent.</p> <p>The project objective is to generate electricity by tapping wind resources, and to contribute towards the government's goal of increasing wind capacity according to the <i>Renewable Energy Law of P. R. China</i>, which has been approved recently.</p> <p>The project will adopt the large scale wind turbines, say, 1500KW, also help enhance the local capacity of China in developing and manufacturing domestic wind generators on its own, quicken the commercialization and marketing of grid-connected renewable energy technologies. Furthermore, the project will demonstrate the feasibility of large scale grid connected wind farms and improve China's energy security and mix by developing sustainable energy alternatives.</p> <p>The proposed wind farm is located in west Guangdong, a remote and poverty-hit region. The implementation of the project is expected to promote local business investments, create new job opportunities, and increase tax income that would further push the sustainable development of renewable energy industry, improve local living standard, boost local education and tourist markets.</p>

## 2.2 Project planning data

Current status of the project	<input type="checkbox"/> Project idea <input type="checkbox"/> Pre-feasibility study completed <input type="checkbox"/> <b><u>Feasibility study completed</u></b> <input type="checkbox"/> Financial closure reached <input type="checkbox"/> <b><u>Under construction</u></b> <input type="checkbox"/> Operational
Expected date for completion of the feasibility study	
Expected date of financial closure	
Expected date for the start of construction	
Expected date of commissioning	
Expected date of full operation	

## 2.3 Project details (1 page maximum)

Describe project background: <ul style="list-style-type: none"> <li>▪ market developments</li> <li>▪ company's strategy</li> <li>▪ business model</li> </ul>	<p>The proposed project will be constructed by two companies with the main aim of making full use of wind resource in the offshore area like Zhanjiang to developing zero-emission power generation.</p> <p>One company was established in 1992 and was respectively listed in Shanghai Stock market as Share A and Share B. As a local energy supplier, its main business is to provide power to the user, until now it has total installed capacity of 3285MW. Thanks to the refinancing function in the stock market, its business expanded very quickly and it even set its great target of doubling its power capacity within three years. Also the company hopes to develop more and more clean power projects like hydropower, wind power projects.</p> <p>Another company, registered in Hongkong, Its ultimate goal is to establish the oversea energy supply base and supply chain, join international cooperation with other international energy companies to import high-tech power generator etc. currently the company also invest four fossil-fired power plants with the total installed capacity of 2070MW. At the same time it also holds some share of LNG transportation companies. In the field of new energy, it has some share of another Wind Power Project, which is also developing as CDM project.</p> <p>To realize their commitment to develop new energy, both companies paid more and more attention to the wind power project. From 2003, it began to make wind resources assessment in the proposed project site. The result shows that there is rich wind resources around here. Furthermore according to the local energy statistics, there was once energy shortage in Guangdong due to the rapid economic development.</p> <p>Therefore both companies decided to develop the proposed wind power project using the CDM framework.</p>
Description of technology applied	
Risks identified	

## 2.4 Finance

Total investment sum	<p>The total investment is 421 Million yuan. The investor comprises of two companies. In the year of 2006, both companies signed one contract to establish one company, which will develop the proposed wind power project. The total investment is listed as follows:</p> <p>Total investment: 421 Million yuan (100%)</p> <ul style="list-style-type: none"> <li>● Bank loan: 65% (273.65 Million yuan, Until now some banks have made their commitments to provide loan to the proposed project)</li> <li>● Initial Registered Capital: 35% (147.35 Million yuan)</li> </ul>	
Yearly operational cost		
Sources of finance	Equity (amount + source)	
	Long term loan (amount + source)	
	Short term loan (amount + source)	
	Other (amount + source)	
Status of finance		
Expected contribution carbon finance + Unit Price	<p>The expected emission reduction will be 70,662 /tons CO<sub>2</sub> equivalent and the CDM revenue will be 7 million Yuan, supposing the unit price will be 10 Euro/tons.</p>	

## 3 CARBON COMPONENT

### 3.1 Baseline + emission reductions

Expected emission reductions (tonnes CO <sub>2</sub> e/yr)	70,662 /tons CO <sub>2</sub> equivalent
Crediting period	<input type="checkbox"/> <b><u>seven years with renewal</u></b> <input type="checkbox"/> ten years without renewal
First crediting year	2008
Intended CDM methodology	ACM0002
Describe baseline situation (carbon emission factor, activity level (e.g. kWh/yr), resulting emissions)	<p>The baseline situation is identified according to the related guidelines specified under methodology ACM0002. It is estimated that the emission factor of China South Power Grid in the baseline situation will be 0.8 ton CO<sub>2</sub>e/MWh under the guideline of conservation specified by the CDM modalities.</p>
Describe project situation (carbon emission factor, activity level (e.g. kWh/yr), resulting emissions)	<p>The proposed project will generate 82.16Gwh electricity, which is zero emission resource. The emission factor is zero. And the proposed project will supply 82.16Gwh power to the grid.</p>
Describe how the additionality requirement is met	<p>The additionally of the proposed project activity shall be demonstrated and assessed using the latest version of the “Consolidated Tool for the demonstration and assessment of additionality” agreed by the CDM Executive Board, which is available on the UNFCCC website.</p>

### 3.2 Planning data

Expected date for Completion PDD	30,Sep 2007
Expected date for Completion validation	31,Oct 2007
Expected date for Host country endorsement / no objection	
Expected date for Host country approval	31,Oct 2007

### 3.3 Carbon finance

Amount of ERs offered	70,662 /tons CO <sub>2</sub> equivalent
Timing of ER Purchase Agreement	It depends