



## Case Study



### Rongcheng, Shandong Province, China - Wind energy city

Rongcheng city in Shandong province has relatively rich wind resources. The city has invested under stage one of an urban project in three wind power plants with total capacity of 200 million KWH per year.



Source:

left photo <http://www.sdrcdz.gov.cn/gd/zdcy.asp?id=27> ;

Right photo: <http://qiye.whbaixing.com/Detail.asp?ID=1019>

“Located in Rongcheng City in Shandong province, the wind farm consists of 33 turbines with a total installed capacity of 49.5 MW. An annual 100,000 MWh of electricity is supplied to the North China Power Grid via Shandong Power Grid, displacing the equivalent amount of fossil fuel generated energy. It thereby reduces the emission of greenhouse gases and limits local air pollution, curtailing its negative health impacts. The amount of electricity generated is enough to supply approximately 76,500 Chinese households for a year. Such a project is associated with investment risks and as a result loans are difficult to come by. It is therefore unlikely that investment would have been secured for this wind farm without funding from carbon credit sales. Sustainability benefits Sustainable solutions offered by renewables Supplying 76,500 Chinese households with clean electricity China Shandong province Location: Shandong province Project type: Renewable energy – Wind Project standard: VCS Project start date: November 2009 Project partner:

Guohua Resourceful (Rongcheng) Wind Power Generation Co., Ltd. Validator: SGS (DOE) Verifier: China Classification Society (DOE) Total emission reductions: > > 97.000 t CO2 e p.a. < < This project has created 65 additional jobs during construction and period and 24 permanent positions during operation in an area with limited employment options. Furthermore, it has built domestic capacity in terms of manufacturing, installing, operating, and maintaining a substantial wind farm. Besides greenhouse gas emissions, the project activity reduces other air pollutants associated with the burn of fossil fuels such as sulphur dioxide, dust and nitrogen oxides, improving air quality and reducing negative health impacts. By demonstrating and disseminating this clean, renewable energy source this project stimulates the growth of wind power industry in China and assists in the diversification of China's energy supply and in the meeting of its renewable energy targets."

## References

China's Largest Solar Power Farm Approved — To Be Built By GCL-Poly Energy, World's Largest PV Polysilicon Producer, 28 August 2012. [www.cleantechnica.com/2012/08/28/china-largest-solar-power-plant](http://www.cleantechnica.com/2012/08/28/china-largest-solar-power-plant)

<http://ppi-re.worldbank.org/data/project/guohua-ruifeng-rongcheng-wind-farm-project-4639>

<https://ppi.worldbank.org/snapshots/project/guohua-ruifeng-rongcheng-wind-farm-project-4639>

[https://www.munichre.com/site/corporateresponsibility-root/get/documents\\_E-625225007/mr/assetpool.shared/Documents/4\\_Corporate\\_Responsibility/02\\_Wind-Farm-SHANDONG-PROVINCE-CHINA.pdf](https://www.munichre.com/site/corporateresponsibility-root/get/documents_E-625225007/mr/assetpool.shared/Documents/4_Corporate_Responsibility/02_Wind-Farm-SHANDONG-PROVINCE-CHINA.pdf)

## Credentials

Authors: Paul Suding, and Florian Steinberg. Edited by: Florian Steinberg