Carbon Offset Project Summary

Climate Positive provides the following VCS project for your consideration, using the following criteria:

- Price: we have been able to access this VCS project at an affordable price,
- The Project delivered a high quality of quantifiable sustainability benefits,
- The Project met our requirement for appropriate stakeholder consultation,
- The Project met our internal selection criteria regarding carbon offsetting,
- Further information on the projects is available to supplement the summary provided.

The prices are based on those quoted from brokers at the time of project request and on the purchase of the whole volume at point of sale.

Prices quoted are in Australian dollars and include brokers fees and Climate Positive management fees. Prices quoted do not include GST.

The costs quoted do not include the addition of bio-diverse plantings. This will be quoted separately if you are interested in this option.

More details including photos and, in some cases video footage, are available if you decide to proceed with the projects listed.

Liaoning Faku Heping Wind Power Project in China

Project and location	Liaoning Faku Heping Wind Power Project Faku County, Shenyang City, Liaoning Province, Northeast China
Standard, Type & Vintage	VCS, Renewable Wind Power, 2009
Project description	The Liaoning Faku Heping Wind Power Project generates electricity from wind resources using advanced wind power generation technology on a commercial basis and delivers this electricity to the Northeast China Power Grid (NECPG). The project reduces CO2 emissions by replacing electricity generated by fossil fuel fired power plant. The project consists of 58 sets of 850KW wind turbines, for a total installed capacity of 49.3 MW. The Faku county area has relative rich wind resources, and it is estimated that the annual generation will be 106,230MWh. As a result, 121,506 tonnes of CO2 emission reduction will be generated.
Benefits summary	The project generates zero-emission wind power and delivers this to Northeast China Power Grid. The scenario prior to this project was that the is NECPG provided the same electricity service. The project assists China accelerate the commercialisation of grid-connected renewable energy technologies and markets which is an important objective of the Chinese government.

Sustainable development benefits	The project has helped to reduce GHG emissions in comparison to the high-growth, coal-dominated business-as-usual scenario. The project has improved air quality and local livelihoods and promotes sustainable renewable energy industry development. The specific goals of the project are to: • generate electricity; • reduce greenhouse gas emissions in China compared to a business-as-usual scenario; • help to stimulate the growth of the wind power industry in China; • create local employment opportunity during the assembly and installation of wind turbines, and for operation of the wind farm • reduce other pollutants resulting from the power generation industry, compared to a business-as-usual approach, such as SO2 and soot.
Environmental co-benefits	Being located in a power grid dominated by coal-fired power plants, development of the project has reduced GHG emissions and also mitigates local environmental pollution caused by air emissions from coal-fired power plants.
Economic co-benefits	The Liaoning province is the main heavy industry base of China, and as the electricity demand is increasing rapidly, electricity becomes a barrier on local economic development. Development of this project has contributed to meeting local electricity demand, therefore boosting the economy in the local region. It has also diversified the power structure of China Northeast Power Grid and reduced the dependence on fossil fuels for power generation. For the local villages they have benefited from the job opportunity during both the construction and operation of the project.
Environmental Impact Statement	In accordance with relevant environmental laws and regulations, an environmental impact assessment (EIA) of the project was completed in 2008. It was approved by the Environmental Protection Administration of Liaoning Province February 20th, 2008. The EIA identified potential areas of impact and outlined the reduction measures to be put in place. <u>Impacts on Air Environment</u> Wind Power plants are known to contribute to zero atmospheric pollution as no fuel combustion is involved during any stage of the operation. However, the sources of air pollution are mainly due to the construction activities including the transportation of construction material, road construction and improvement and cadre construction etc. The impacts on air environment are temporary and end when the construction is completed.

	Several measures were undertaken to reduce this impact, such as prohibiting the construction under strong wind weather, reducing the area of construction, spraying water to reduce dust during construction, and reducing the speed of vehicles in the field. The air quality at the site met China Ambient Air Quality Standard. <u>Impacts on Noise Environment</u> The noise of the project in construction phase is from vehicles and machines on-site. During the construction period, the noise level was lowered and this met the China Environmental Noise Standard in Urban Areas. The project is located on hills about ten miles away from the local residents. Thus there was minimal noise disturbance. Moreover, operational noise from the rotating blades is expected to be minimal due to the attenuation of noise beyond a distance of 300-500m from the wind turbines. The noise meets the China Environmental Noise Standard in Urban Areas and did not impact on nearby residents. <u>Impacts on Water and Solid Waste</u> The wind-farm does not consume any water, nor does it generate any wastewater in the operation phase. The possible negative impacts are the household wastewater and solid waste produced by builders and staff, and the waste earth from digging of the foundation in the construction phase. A highly automated monitoring and control system was put in place and the household wastewater was first treated in a septic tank, and then disinfected before discharge. Moreover, the amount of household solid waste was very little, which did not have an impact on the environment. The solid waste is collected and moved to the landfill site of the nearest city. The waste earth from the digging was used for refilling. The rest of the waste earth was placed in the low area of the site which and replanted with grass. The water and solid waste had no significant impact on the environment. <u>Impacts on telecommunications and television transmissions</u> As a 110kV substation was to be constructed, the electromagnetism impact of the project was evaluated. Based on the scenarios of the built wind-farms, the result concluded that the operation of wind farm will not have electromagnetism impact on the nearby enterprises and residential areas that are 5 km away from the wind farms. The electromagnetism impact is below the standard limit value specified in the Hygienic Standard on Power-frequency Electric Field Working Places. Therefore, the electromagnetism of this project in the operation phase doesn’t impact the production and daily life of nearby enterprises and residents.

	<u>Impacts on Ecosystem Environment</u> There is a potential impact on vegetation, animals and migrating birds. The minor quantity of solid / liquid discharge generated during the construction phase has no noticeable impact on soil use and the project proponent had made arrangements to dispose these in an environmentally acceptable manner. Moreover, there are no migratory birds / endangered species in the region of the project. After the completion of the construction, the surrounding area was planted with vegetation and the temporary equipment taken away. The ground occupation will not have obvious impact on the local ecology impact. Therefore, the activities will not generate any negative impact on the ecological environment. <u>Socio-Economic Impacts</u> The project generates eco-friendly, GHG free power that contributes to sustainable development of the region. Moreover, the locals have benefited economically through land sales and revenues. The project activity helps the to up-skill the local workforce in the region, and has improved the employment rate and livelihood of local populace in the vicinity of the project. The project activity did not have any major adverse impacts on environment during its construction and operational phase. The project is a more sustainable way of providing power to this region.
Stakeholder Consultation	The Shenyang Longyuan Wind Power Co., Ltd. undertook thorough consultation and provided advanced notice to the region of the project consultation process. Methods to announce the meetings included bulletin on the various village bulletin boards in March 2008. Through the bulletin, all potential stakeholders could obtain the detailed information about the project. The project owner established a mailbox at the gate of their office building to accept comments from any stakeholders. The meetings engaged 11 stakeholder representative bodies from the Development and Reform Bureau of Faku County, the Environmental Protection Bureau of Faku County, the Rural Electricity Supply Bureau of Faku county, the Government of Faku county, the Renewable energy management Bureau of Faku county, and the Majiadian Village, the Nandigou village, the Yushudi village, the Donggou village, and the Hongtudingzi village. Every stakeholder representative expressed comments for the proposed project and no opposition was received. The local municipal government were highly supportive of the project, and expected an increase of local finances and new employment opportunity. Comments from villager and forestry worker representatives: The project site is located on the top of the hills far away from the local residents. There are no residents and croplands in the area 10 km around the project. Therefore, there is no issue on noise disturbance and residents movement.

	Moreover, the project owner provided compensation for the land occupied by the project. The local residents also benefit from the employment opportunities for construction and operation of the project. Education level of the respondents: primary level (13%), middle level (45%), high level (42%). 100% of the respondents have some knowledge and understandings about wind farm projects. About 87% of respondent believed that the Project will have overall positive impacts, such as “increase of job opportunities and income”, “improvement of living standard”, on their livelihoods, while the others believe there will be little impact on their livelihoods or do not know the impacts. Most of the respondents believe that the project will have overall positive impact on their livelihoods with better standard of living. Among the negative impacts, the two main issues concerned are land use and environmental pollution. The project owner has provided compensation to the local residents for any issues related to occupation and plants damage. For the noise, waste water and electro-magnetism pollution, the environmental protection methods listed in the EIA minimized its negative impact on the local people and the ecological environment.
Reference documents	Project information, Project documentation and Validation Report can be provided pre purchase and upon request.