



CERES PROJECT

Clean Energy from Yorke Peninsula

Wind Farming & Compatibility with Traditional Farming Fact Sheet



Wind farms are highly compatible with, and complementary of traditional farming activities, as wind farms:

- Have a minimal impact on existing land use because they have a small footprint (typically between 1% and 2% of land area hosting the turbines);
- Enable existing farming activities to continue with minimal impact.

Overseas and Australian experience provides unequivocal evidence of the compatibility of wind farming with traditional farming.

Wind farms provide a financial diversification and increase the net income to farming communities through both payment of turbine rentals and ongoing job opportunities. This can greatly assist in drought proofing farms through this consistent and minimal risk income source.

The Overseas experience: the Iowa example, USA

The state of Iowa has arguably the most productive cropping land in the world, blessed with deep, rich soils and consistently out-produces the whole of Australia in terms of total cereal grain production. This is despite Iowa having a land mass of less than 2% of that of Australia.

Iowa often referred to as the “food capital of the world”, is home to the highest density of wind turbines of any state in the USA with some 4,536 MW of installed capacity and over 2,893 turbines. This compares with the total

installed capacity in Australia of over 2,824 MW. Iowa has almost double the wind farm capacity in MW of Australia.

It is very clear that high grain producing states like Iowa have expanded their farming activities by adding “wind farming” to their economic pursuits. The wind is another resource like the sunlight, water, land and soils that can be harnessed to improve the economic wealth of farming while allowing existing farming activities to continue with minimal impact.

In Iowa the wind farm capacity is planned to continue to increase, with a further 600 MW under construction.

The Iowa and other midwest states’ experiences show that wind farms have been harmoniously and profitably integrated with traditional agricultural practices, including aerial activities.

The positive experience seen in the USA, the largest grain exporting country in the world, has also been clearly seen in other countries such as Denmark, Spain and Germany.

Wind farms have shown to be compatible with and complementary of traditional farm activities because they have a minimal impact on existing land use (i.e. a small footprint) and existing farming practices.

The CERES Project and compatibility with farming activities

- The CERES Project has been initiated by local landowners that recognized the compatibility of wind farms with traditional farming
- The CERES Project design principles have had compatibility with farming in mind from the outset, with decisions such as no overhead power lines anywhere in the project – thus minimising aerial impacts
- The total footprint of the wind farm (wind turbines, new access roads and convertor station) will be approximately 2 sq kms or about 1% of the total area across which the wind farm is spread.
- The CERES Project wind farm is the least densely populated wind farm in Australia
- Wind farms have been referred to as a vertical crop for a farmer where traditional farming (cropping, grazing) continues directly under and around the turbine.
- Wind turbines represent a drought proof and very low risk investment with stable and protected yields



In the case of the CERES Project the payments to farmers are CPI indexed, yielding many more times the return of that of traditional crops for the equivalent land being used.

Wind farm income provides the opportunity for further investment in traditional farming and the achievement of increased productivity and greater farm efficiencies.

During the construction, strict protocols in landowner agreements govern the requirement to maintain the integrity of the farming land and minimise interference with production. At the end of the wind farms life the turbines and towers are removed by the wind farm owner.

The Colgar Wind Farm at Merredin in Western Australia's central wheat belt consists of 111 wind turbines and was commissioned in 2011. The Wattle Point Wind Farm is located in Edithburgh on the Yorke Peninsula and will be within 40kms of the southern zone of the proposed CERES Project. The wind farm consists of 55 wind turbines and was commissioned in 2005.



These two wind farms are also further examples of how wind farms installations are compatible with farming activities, notably cropping land in Australia.

The Ambidji Group conducted two aeronautically related reports, the first one related to general aeronautical matters of interest to the Civil Aviation Safety Authority (CASA) and the second on agricultural applications of fixed winged aircraft (aerial spraying).

The first report concluded that there were no material CASA matters and that the project presented low risks on a variety of areas, including: flight paths, communications, etc. The second report, incorporated information provided in submissions sought by the CERES Project which included CERES involved landowners and nearby/abutting landowners.

The report concluded that the overall impact was small, recognising that the primary mitigation measure employed was to ensure no overhead power lines and the fact that the overwhelming majority of spraying was ground based.

Additional mitigation measures have been identified including: greater use of ground spraying, helicopter applications and direct compensation for adjacent farming properties. Consultation with key stakeholders is in progress.

