

Wind Energy Case Study

Farming the wind

For many farmers, harnessing the wind enables them to improve the viability and productivity of their farms. Wind turbines provide an additional source of income, and the roads required for building and operating wind turbines enable farmers to improve their farming operations.



Wind turbine blades being moved to site, Tararua wind farm

Not many people know this, but sheep like wind turbines.

“The transformers are warm,” says Barbara Jackson, a Manawatu farmer. “The sheep like to snuggle up to them.” The sheep also use the towers to shield themselves from driving wind and rain.

Barbara, her husband and son have 32 turbines on their farm near Palmerston North. They are proud to have been part of making electrical generation history in the Manawatu. The first turbines at Tararua wind farm went up in 1998 and were “a real tourist attraction”. Not all of the neighbours liked the thought of wind turbines, but Barbara, whose house is 1400 metres from the nearest turbine, has never heard them in the house.

“When I am outside in a strong easterly wind I can hear the turbines. It is like hearing the sea rolling in, but we never hear them inside the house.”

Farm improvements

There are a number of benefits in having a wind farm on your property, apart from having happier sheep. “We now have a proper road and not a track through the middle of our farm,” says Barbara. They can now get a large fertiliser truck all the way up to the top airfield.

When the turbines were being installed there was a bit of disruption, but as long as everyone worked together there were no problems.

“We now have a proper road and not a track through the middle of our farm,” says Barbara Jackson.

"We worked with the contractors and they worked with us."

The wind turbines provide another income stream for the farm. Rent and royalties are received for having the turbines and the power they generate. "We like windy days," says Barbara.

Barbara's advice to other landowners who may be thinking of having turbines on their land is for them to do their homework because every agreement is different. She would certainly do it again. And so would her sheep.

Diversifying income

Gerry Soanes, National Manager – Property for Landcorp, is keen to have wind turbines on some Landcorp farms. After several years of investigating the wind resource on a number of farms, the first wind turbines are currently being erected on a Landcorp farm at Mahinerangi wind farm in the Clutha District.

Like Barbara, Gerry is aware the construction process can cause disruptions to normal farming operations. But he thinks these can be managed, and there is also an upside.

"Wind turbines provide a guaranteed annuity, which can increase the financial viability of a farm. For a private farmer, it could be their superannuation plan.

"Invariably wind farms are built on second class land," says Gerry. "The wind turbines won't detract from the grazing value of the land, and wind farming is more attractive than planting trees."

Having a good agreement with the developer is important. "An agreement between a developer and a landowner can last up to 50

years. It needs to be inflation proof and flexible enough to adjust to changing circumstances in the future," says Gerry.

Improving productivity

Mark Usherwood not only owns some of the land on which Tararua wind farm is sited, he also advises other farmers and landowners on setting up wind farm agreements. "We had the first wind farm agreement in New Zealand with an energy company and it has served us well." Over the last 12 years the wind farm has expanded and been upgraded three times. "Not only does the wind farm generate income it also increases the capital value of the land," says Mark.

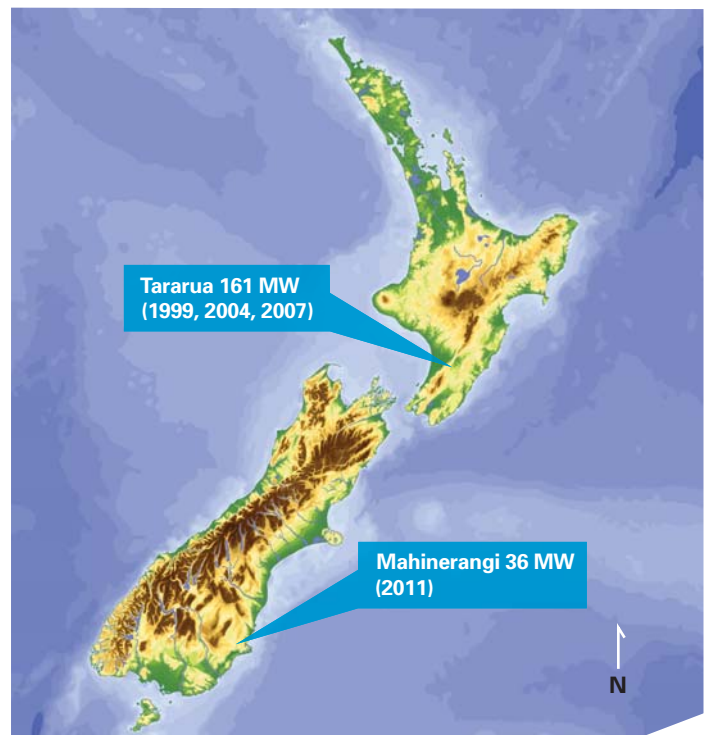
"There is always some disruption while they are constructing the wind farm, but it has not affected the stock numbers in any way. In fact because of the extra income we have been able to do more on the farm."

The whole community has benefited from the development and operation of the Tararua wind farm. "Neighbouring farms have run farm tours for tourists so that they can get close to the turbines," says Mark. "And local contractors get involved in construction and also in the ongoing maintenance that is needed."



Site access road and meteorological mast at Mahinerangi wind farm

"Because of the extra income we have been able to do more on the farm," says Mark Usherwood.



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The New Zealand Wind Energy Association (NZWEA) is an industry association that works towards the development of wind as a reliable, sustainable, clean and commercially viable energy source. We aim to fairly represent wind energy to the public, government and the energy sector. Our members include 80 companies involved in New Zealand's wind energy sector, including electricity generators, wind farm developers, lines companies, turbine manufacturers, consulting firms, researchers and law firms. Find out more about wind energy and wind farms in New Zealand at www.windenergy.org.nz