

Mount Cass best site

Rangiora-based MainPower has lodged a resource-consent application to build a windfarm on Mount Cass near Waipara. TODD MEAD discusses some of the environmental concerns.

A windfarm on Mount Cass presents clear benefits. It will produce more than enough power for every home in the Hurunui and Waimakariri districts; it will add up to \$38 million to the local economy during construction alone; and for a country in the grip of winter and concerned about the ability to keep the lights on, it will help achieve long-term security of supply.

What's more, it will do this while contributing to the national goals of increasing and diversifying renewable energy generation, and reducing greenhouse-gas emissions.

Most people I talk to about MainPower's proposal to build a windfarm on Mount Cass understand these benefits and support a local renewable energy project in the region, conceived by a locally owned company.

However, some are asking: "At what cost?" They are pointing to the ecological values of Mount Cass and, while acknowledging the benefits, say the impact will be too great.

The next question asked is: "Can't you just build it on another hill?"

From the time of our earliest consultation over Mount Cass, we were aware of concerns about the local ecology. However, because of the measures we will take to mitigate or offset any impact, the windfarm will have ecological benefits overall.

This isn't just our opinion. It is the opinion of a highly regarded team of independent experts who have looked long and hard at our proposal.

It is unfortunate that with a proposal such as this, some misinformation gets around. We have heard it said that 20 per cent of New Zealand's nationally threatened plant species are to be found on limestone. This may be the case, but there are very few of them at Mount Cass.

We have also heard that Mount Cass supports plants that are not

found anywhere else. Again, this is simply not correct.

In fact, Mount Cass is home to two threatened plants – the nationally endangered McCaskill's hebe (*Hebe roualia* var. *McCaskillii*) and the nationally vulnerable limestone wheatgrass. There are another eight plant species with "rare" classifications, and it is home to a strong population of the threatened Canterbury gecko. There is also a host of other plant, bird, and insect life, all of which will still be there after the wind farm is built.

It is important to remember that Mount Cass has been a working farm since 1850, and is a highly modified environment. A windfarm on Mount Cass means that we can take some measures which will be beneficial to the ecology. This includes retiring the most sensitive areas from grazing, assisting a far greater rate of regeneration than is happening currently. Importantly, we will create covenants over key parts of the ridge, so that biodiversity values are protected in perpetuity.

We also intend to extend the Mount Cass walkway onto the windfarm site, so that people can see the turbines, the bush, the limestone pavement and the impressive views.

The full walkway is quite a climb, so our road will also be available from time to time to allow the less physically able to visit the site.

If the windfarm does not go ahead, Mount Cass will continue to be farmed.

We have spent a great deal of time and effort carefully designing the windfarm to minimise impact. But we do need a road to get the turbines along the ridge.

The windfarm will have a 21-hectare construction footprint, of which 16ha will be on pasture. However, we cannot avoid some vegetation, and we will need to clear 2.2ha of forest and about 3ha of



Making hay: Mount Cass has been a working farm since 1850. Photo: Tim Cronshaw

shrubland, equating to about 1.4% of nearby similar vegetation.

Of the rare species, many, including the hebe, are located on the steep northern escarpment, and we have avoided this with our design. The limestone wheatgrass is mostly to the south of the windfarm, and more than 95% of it will be left alone.

To address the small, unavoidable impact, our design includes the replanting of shrubland and some forest species using local seed sources.

Planting will be targeted to improve connectivity between existing forest patches. We will, of course, fence off the planting areas and initiate pest-control programmes.

Our conclusion is that the Mount Cass windfarm will not compromise the local ecology, but will become a valuable asset for Canterbury.

What of the question of moving the windfarm to another site?

MainPower has been looking at potential windfarm sites in North Canterbury for several years. Other sites have potential, but Mount Cass is the best, and the others do not stack up right now.

Access is always key to a windfarm. We have access rights to Mount Cass, meaning that we have

the ability to build a windfarm there, resource consent permitting.

That is not an easy thing to achieve. It is a relatively easy hill to get to and to get up, meaning equipment can be easily trucked there with minimal disruption to locals and the environment. There is also easy access to the transmission grid.

But, the quality of the wind is vital. The next best potential windfarm site MainPower is monitoring has 10% less wind than Mount Cass. While this might not sound a lot, it means a 25% higher cost of power, rendering the project uneconomic with current electricity prices and the high cost of turbines. Our conclusion is that Mount Cass is MainPower's only economic windfarm site in today's climate.

There is also a wider important environmental argument which relates to the greenhouse-gas offsetting benefits.

The Mount Cass windfarm can truly be a win-win for the local and global environments, as well as for local renewable energy needs.

■ Todd Mead is the commercial manager of MainPower.