



## New Zealand: Wind Power in Te Apiti

### Short description

The purpose of the project is to construct and achieve commercial operation of a wind generation development of 82.5-96.25 MW in the Manawatu/Ruahine region of the lower North Island.

- **Project type:** Renewable energy, wind
- **Type of certificate:** VER
- **Quality standard:** The project is validated and verified according to the Gold Standard by DNV.



### Project background

The project consists of 55 turbines with a capacity of 1.65 megawatts each. The construction of the project was completed in early 2005. The wind farm is capable of generating enough electricity for 45,000 average-size homes.

The supply of electricity in the New Zealand market is provided mainly through hydro generation with limited storage, the majority of which is situated in the South Island. Most of the load in New Zealand is based in the upper North Island as most of the population and industry is based there. Currently a dual fired gas and coal thermal plant provides the flexibility. If gas is unavailable to do this, the quality and security of supply is ensured by coal fuel or coal fired stations. Therefore the extent to which coal generation is utilised will be reduced by any additional renewable energy generation that is available.

### Sustainable development

The New Zealand Government's energy policy objective is "to ensure the delivery of energy services to all classes of consumer in an efficient, fair, reliable and sustainable manner". The overall outcomes sought include "environmental sustainability" including incorporating the improvement in New Zealand's energy efficiency and a progressive transition to renewable sources of energy. This project assists the New Zealand Government in meeting its energy, renewable energy, emission reduction and business opportunity objectives.

Significant benefits both locally and nationally result from the project including:

- The provision of greater diversity in the energy supply of New Zealand;
- The fact that the generation of electricity by wind uses a renewable resource;
- Wind power displaces the need to burn gas or coal to produce electricity, resulting in less carbon dioxide, sulphur and nitrous oxides being released into the atmosphere; and
- the development of the wind farm will benefit the local economy during the construction phase and could boost the local tourism industry.

