Media Release

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New Zealand’s largest wind farm turns 20!

From humble and ambitious beginnings as a 48 turbine, 31MW project, the Tararua Wind Farm, now 134 turbines and 161MW, is New Zealand’s largest wind farm, both in terms of number of turbines and installed capacity.

Today, Stage 1 of the Tararua Wind Farm is celebrating twenty years of safe and reliable operation.

“The first 48 turbines of the Tararua Wind Farm reached official commercial operations on 24 December 1999 and even at 20 years old the project remains one of the best performing in the world,” said Tilt Renewables’ Chief Executive, Deion Campbell.

“We are thrilled to mark the milestone of these machines reaching the end of their ‘design life’ and celebrate that they are still going strong, at this internationally iconic commercial scale wind farm site.”

Built over two stages in 1999 and 2004, without government subsidy or incentives, and on 700ha of farmland on the Tararua Ranges, stages 1 and 2 have a total of 103 Vestas V47-660 kW wind turbines, on lattice towers with a hub height of 40m. Together, Tararua 1 and 2 have the annual capacity to power around 27,000 homes annually.

“Tararua Wind Farm is another iconic global example of why Vestas is the world leader in wind generation and more broadly, sustainable energy solutions. We create technology that stands the test of time, but we also offer life-long services that are underpinned by product expertise, passion and a commitment to see our customers achieve their best results,” said Peter Cowling, Head of Vestas Australia and New Zealand.

The longevity of the wind farm is not only thanks to the best practice maintenance and management procedures employed but also to the friendships formed whilst addressing the interesting technical surprises over the project’s development, construction and operation.

“Operating this wind farm successfully has been the result of a long-term commitment by Tilt Renewables and Vestas in sharing an open and collaborative partnership, one that now influences the other projects we undertake together,” continued Deion Campbell.

Stage 1 was completed in December 1999, making it the largest wind farm in the southern hemisphere at the time. This was also when Tilt Renewables (then Trustpower) took ownership, entering the fledgling wind industry for the first time.

Stage 2 was the first wind farm construction project executed by Tilt Renewables, adding 55 turbines to the existing 48 from Stage 1.

The project was successfully delivered ahead of time and budget by members of Tilt Renewables’ executive management team.

“It’s quite incredible that a wind farm so far away from Denmark has provided such a good learning opportunity for me professionally. I think it’s very much due to the openness of Trustpower and Tilt Renewables,” said Henrik Kanstrup Jørgensen, Taraura 1 Product Manager and Technical Sales back-up, Vestas.
“It stands out as one of the best experiences I have had professionally and personally in my career. The team effort on this project was very unique,” said Berit Lennert Puggaard, Vestas Project Manager of Tararua Wind Farm following construction completion.

For many years this site was the best performing commercial wind farm in the world and the original turbines have already generated more than twice the design life expected production volumes.

“As landowners we are proud to be associated with Tilt Renewables and its operation of one of the most efficient wind farms in the world. We have a great relationship with Tilt Renewables, one we are sure will continue for many years to come,” said Tararua wind farm landowner, Brett Davey.

The turbines still achieve reliability similar to new turbines, a testament to the asset management program delivered by Vestas, as maintenance partner to Tilt Renewables for more than 20 years.

“Not only have the wind turbines survived the first 20 years but there is still a handful of people employed in Vestas today that were involved in the project 20 years ago,” said Bjarne Iversen, Vestas Project Manager during construction.

Three of the V90 turbines at the Stage 3 site were the first Vestas turbines in the world to reach production of one hundred million kilowatt hours, further cementing the site’s reputation as one of the best in the world.

“Turbines changed significantly since 1999, with learnings from operating the V47s at Tararua influencing the designs we see today. We also understand the wind at the site very well and even though the machines are running well, it is time for Tilt Renewables to start planning for decommissioning and repowering of the site, to create the next best performing wind farm in the world.”

“We look forward to working with stakeholders and the community on what the next 30 years for this asset could look like and the contribution that can be made to New Zealand’s renewable energy ambitions,” ends Deion Campbell.

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For further information on the Tararua Wind Farm or for interview and image requests, please contact Tilt Renewables’ media contact, Martine Holberton on: 0414 889 847 or martine.holberton@tiltrenewables.com