

Mount Emerald Wind Farm Update



First turbine erected at Mount Emerald Wind Farm

Ratch Australia Corporation announced the completion of the first wind turbine at the Mount Emerald Wind Farm near Walkamin on November 19 after the three 16 tonne blades, each 57 metres long, were positioned in place atop a 90 metre tower.

Ratch Construction Director, Mr Rene Kuypers, said the significant milestone capped a huge team effort.

“Reaching this construction point has involved careful planning over many months and a lot of work from a lot of people and I’d like to thank them all.”

“From unloading the cargo at Cairns Port to carefully trucking the components up to Walkamin and now the crane crews erecting the components, it’s teamwork at its best,” he said.

There will be 53 wind turbines erected in all, each with a capacity exceeding 3 megawatts (MW) for a total capacity of around 180MW.

Building on strong foundations

The milestone follows the raising of the four tower sections in the first week of November.

In a good sign for the future the blade installation was delayed due to high winds on site.

The bottom tower section was anchored to its 800 tonne reinforced concrete foundation by 168, 36mm bolts.

Subsequent tower sections were then added and bolted together before the turbine’s 120 tonne nacelle was added.

The nacelle is the box housing all of the generating components in a wind turbine, and is as big as a shipping container.



Malanda Street Party welcomes first delivery of turbine blade to site

Hundreds of local school children joined the Malanda Chamber of Commerce and Ratch Australia Corporation on 10 October in celebrating the transit of wind turbine components through Malanda to the Mount Emerald Wind Farm site near Walkamin.

Escorted deliveries will continue to occur during daylight hours Monday to Saturday through to around May 2018. Each delivery truck will take up to five hours to complete the 207km route from the Cairns Port at an average speed of 50km/hour.

Mount Emerald Wind Farm Community Coordinator, Kim Forde, said the street party was "great feedback".

"The Malanda Street Party is unprecedented in my career because it wasn't our idea, it was an initiative of the local Chamber of Commerce and the people of Malanda who wanted to show their support for a project that is investing millions in the region," Ms Forde said.

"This is great feedback for Ratch, from day one we've involved local communities in the development of this project, responded to their feedback and implemented approaches to increase their involvement," she said.

There will be 53 wind turbines delivered in all.

Pre-construction activities. UXO study and geotechnical surveys.

FEB17

Construction activities include access road upgrades, and excavation of substation bench.

OCT17

Erection of first turbine.

MAY18

All turbines are erected. We flick the switch, full commercial operations begin.

DEC16

EPC Contractor Vestas formally handed site.

MAY17

Wind turbines components will commence being delivered to site and erected.

NOV17

Substation is completed and wind farm is connected to the electricity grid network.

SEP18

Quoll detection no problem for Sparky and Lily



Wildlife Detection Dog Specialist Amanda Hancock and her dogs Lily (left) and Sparky on the lookout for Northern Quolls at the Mount Emerald Wind Farm site.

Cairns-based consultancy 4 Elements, has been engaged since the start of construction to ensure environmental disturbance is kept to a minimum on site.

In addition to protecting endangered plant species across the site, the 4 Elements team led by Director Mellissa Jess, is responsible for the capture, tracking and relocation of Northern Quolls from construction areas to safer habitats within the project area.

Specialised traps are placed across the designated construction zones to capture any quolls within the site. Captured quolls are fitted with lightweight radio tracking collars before they are released to allow teams to more easily clear current and future work areas.

The initial estimate of the quoll population on site was around 55, however, work to date has seen 90 individuals captured and collared with all seemingly going about their business in an undisturbed manner.

To supplement the traps and aid detection, 4 Elements' has engaged Saddler Springs to use specially trained dogs to locate quolls. This additional effort aids in identifying un-radio collared quolls, especially females with juveniles in dens, to protect them from construction activities.

Trained by wildlife detection dog specialist and conservation expert, Amanda Hancock, the dogs Sparky and Lily have been active on site over the past four months.

Each dog and handler working up to two to three hours across numerous sites of quoll denning habitat each morning replaces a four-person ecologist team scanning for collared quolls.

Within 10 minutes of working a new site the dogs have proven they can detect the presence of quolls and are able to track them up to 50m away.

Progress in pictures - a series of firsts



14 August 2017

First turbine foundations put in place

The 800-tonne foundation which is buried to ground level provides an immovable anchor for each turbine and consists of a 50-tonne reinforced steel cage filled with around 350m³ of concrete, or up to 70 truckloads.



20 September 2017

First delivery of turbine towers to Cairns

The vessel Oldendorff Erna arrived at Cairns Port carrying tower sections. Over the life of the project's construction, six cargo vessels containing blades, towers and more than 450 components will be delivered.



26 September 2017

First delivery of turbine blades to Cairns

Representing the largest cargo ever delivered at Cairns Port, the BBC Emerald delivers 81 turbine blades, each 57m long and weighing 16 tonnes. An estimated 185,000 revenue tonnes of cargo will be delivered during project construction.



10 October 2017

First delivery of turbine blades to site

Specially designed trucks in transit from Cairns to the Mt Emerald wind farm site near Walkamin. Escorted deliveries will continue through to April/May 2018.



10 October 2017

First arrival of blades to site

The first turbine blade delivered to site winds its way up Mt Emerald's arterial road under the close supervision of pilot escorts. The blades are made of carbon and fibre-glass shells bonded to a supporting beam.

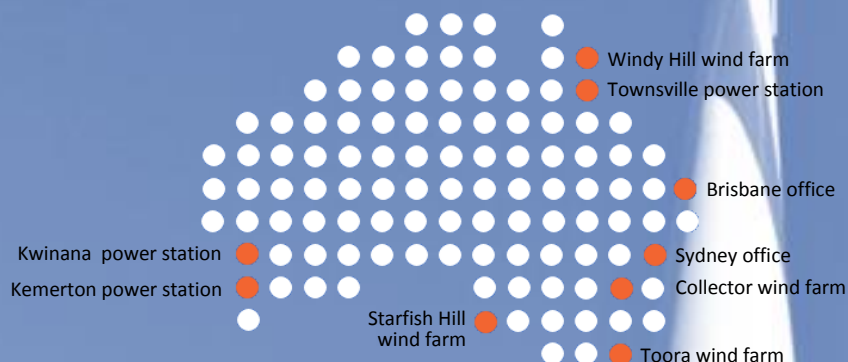


19 November 2017

First tower erected

Mt Emerald's project construction crew completes the first wind turbine. A 700 tonne crane is needed to place the 120 tonne nacelle and 57m long blades into position.

Ratch is answering Australia's call for cleaner energy.



For more information

Please visit
ratchaustralia.com.au, or
mtemeraldwindfarm.com.au

or email

info@mtemeraldwindfarm.com.au

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